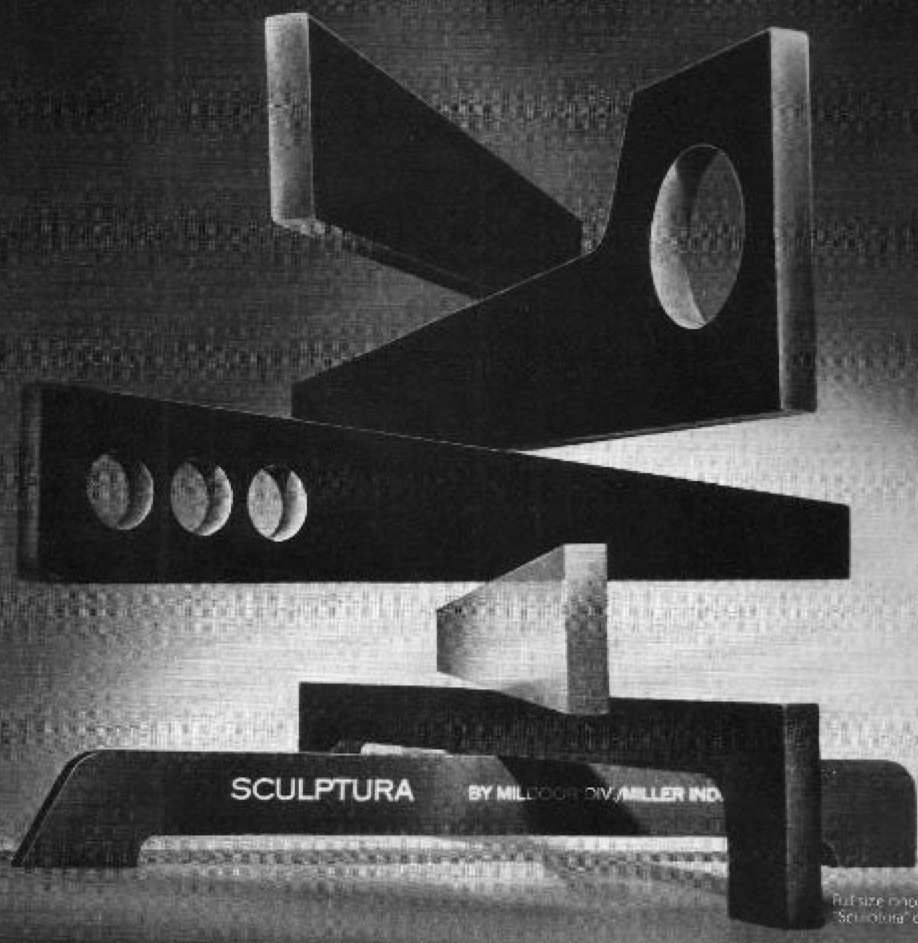




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FLORIDA ARCHITECT

JOURNAL OF THE FLORIDA ASSOCIATION OF THE AMERICAN INSTITUTE OF ARCHITECTS

March/April, 1984
Volume 31, Number 2



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Features

Departments

Cover photo of the main facade of the Gallery at Bay Harbor from the Kane Concourse. Architect: Jaime Schapiro. *Photo by Mark Surloff Photography © 1983.*

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The year got off to a good start with a new publishing schedule and some exciting designs which were featured in the first issue of 1984. The quality of the articles and photographs which were submitted for the January issue got us excited and geared up to go on. I think this issue is equally interesting for it focuses on a number of projects from Miami to Pensacola which incorporate exciting design concepts in their massing, fabric, plan ... even color. This issue sums up a lot of what I feel about what's happening to Florida architecture right now. It's innovative and it's humanistic and it's good for the people. If you question that statement, consider City Park in Fort Lauderdale. It's a parking garage that's every bit as much for the people as it is for the auto.

In the next four issues of 1984, we'll take a look at a thousand bed stockade that looks like anything but a jail. You'll read about the new School of Architecture at Florida A & M in Tallahassee, multi-family housing with a twist, theatre restorations around the state that are saving the best of what's old and that's just "the tip of the iceberg."

With the guidance of a Publications Committee composed of FA/AIA members who have guided the progress of the magazine for the last three years, we are directing our attention to redesigning the graphics of FLORIDA ARCHITECT. With a new, and hopefully more exciting format, in which to present your projects to our readers, we hope this publication will be better than ever.

Diane D. Greer

Main Street Program Coming To Florida

Civic leaders in hundreds of cities and towns are hard at work, breathing life back into Main Street. Whether it's the major downtown corridor in a small town or a neighborhood commercial area in a big city, Main Street has been rediscovered. As they strive to reinforce and rekindle the economic vigor and the values Main Street symbolizes, states and towns often turn to the National Main Street Center for assistance.

The National Main Street Center is a human resource and technical reference program set up by the National Trust for Historic Preservation to stimulate economic development within the context of historic preservation. The Center helps develop comprehensive strategies for economic revitalization which emphasize Main Street's present and historic assets yet recognize the need to adapt in order to serve today's markets. Tallahassee is an excellent example of the unlimited possibilities that are available in terms of downtown redevelopment. There is a massive undertaking going on at present in Tallahassee to preserve much of Main Street (Monroe) and Adams Street which parallels it one block to the West. Old buildings are being restored and adapted for contemporary uses and life is being breathed back into alleys and sidewalks and city commons.

In February, the National Main Street Center sponsored "Revitalizing Downtown: Understanding Real Estate Development." This training program examined roles that public entities and private sector groups must play if they are to successfully direct real estate development in downtown areas.

For more information about the Main Street Program contact the Florida Trust for Historic Preservation, P.O. Box 11206, Tallahassee, Florida 32302.

Architect Miller Deceased

Kenneth W. Miller, AIA, died October 11, 1983, in Orlando at the age of 74. Miller was a 1932 graduate of the University of Florida School of Architecture. He is a former councilman for the City of Orlando. Miller was a retired Lt. Col. in the U.S. Army and a practicing architect until his health failed after World War II.

Lacancellera Earns Ph.D. in Architecture

George Lacancellera, CCS, a professional member of the Ft. Lauderdale CSI Chapter, has earned a Ph.D. in architecture, an extremely rare achievement for an architectural specifications writer.

Lacancellera became a CSI professional member in 1961, in the Metro New York CSI chapter. Since then he has been a delegate to several CSI conventions, and an officer of the Ft. Lauderdale chapter.

For a decade, Mr. Lacancellera was associate in charge of specifications for Edward Durell Stone and Associates, NYC. For the past fifteen years, he has been an architectural specifications consultant, serving many prominent architectural firms in the country. He has been in his profession for 35 years and enjoys the expertise gained by his involvement in several billion dollars worth of very large sophisticated projects throughout the country.

Lacancellera practices in Boca Raton where he works with a number of Florida architects.



Lacancellera

Emeritus Architect Monberg Passes

Lawrence H. Monberg, Sr., Architect Emeritus, died on November 3, 1983. His career spanned six decades and he was listed in Who's Who in America for his architectural achievements.

Born in Copenhagen, Denmark, into a family of architects, he studied at the Ecole des Beaux Arts in Paris and the School of Atlier Rebori and he designed many significant buildings in the grand manner.

In Chicago, he designed Ricketts International Restaurant and the famous Kungsholm Theatre Restaurant remembered for its puppet operas. His work throughout the Midwest in educational design ranged from award-winning elementary and secondary schools to college and major university campuses.

Monberg was a longtime Emeritus member of the Florida Association of the AIA and he left a legacy of fine architecture to remember him by.



Monberg

New Publications Available

A comprehensive professional liability loss prevention teaching guide has been published by the Association of Soil and Foundation Engineers (ASFE). Titled *The Guide to In-House Loss Prevention Programs*, the new publication has been designed for a variety of applications. The guide will be used principally, however, for conduct of in-house seminars by consulting engineering firms, to better acquaint project managers with important professional liability loss prevention principals and techniques. It can also be used to assess prospective employees' knowledge of loss prevention practices, and to determine what additional education

those recently hired may acquire.

The guide is available at $50.00 per copy from ASFE, 8811 Colesville Road, Suite 225, Silver Springs, Maryland 20910.

The National Lighting Bureau publishes a variety of guideline booklets which are all listed in a publications directory available without charge from the National Lighting Bureau, 2101 L Street Northwest, Suite 300, Washington, D.C. 20037. New booklets include such titles as *The Energy-Saver's Guide to Good Outdoor Lighting* and *Lighting Energy Management for Colleges and Universities*.

Millions, if not billions, of dollars could be saved each year through application of numerous simple techniques that can improve construction industry productivity. These techniques are discussed in *More Efficient Electrical Construction*, a new 16-page monograph published by the National Electrical Contractors Association (NECA) as part of its *Electrical Design Library* (EDL) series of periodical monographs. A copy of the new publication is available without charge by writing to NECA, 7315 Wisconsin Avenue, Bethesda, Maryland 20814-3299.

Anti-Nuclear Architects Group Formed

Architects for Social Responsibility is a national non-profit organization of architects, related professionals and students. It was organized to help the public to understand the catastrophic consequences of nuclear war and the negative effects that massive and disproportionate expenditures for nuclear weapons have on the quality of life in America.

Two of the group's objectives are to mobilize the profession as part of a national grass roots movement whose objective is to prevent the destruction of our civilization by nuclear war and to consolidate and expand research in order to understand and clarify the impact of nuclear war, or the accidental detonation of a nuclear device, on the man-made environment and its population.

The Board of Advisors to Architects for Social Responsibility is a list of the most prestigious architects in the country including Gwathmey, Graves, Tigerman, Venturi, Giurgola, Pelli and Roche, just to mention a few.

According to literature being distributed to potential members, the most valuable asset of ASR is its access to fellow professionals who collectively are among the most creative people in the world.

If you are interested in helping the ASR with financial support, you may write to Penny Blum, Coordinator ASR, 225 Lafayette Street, New York, New York 10012.

Evans Appointed to AIA Housing Committee

Donald F. Evans, AIA, president of The Evans Group, has been appointed to the 1984 Housing Committee of the American Institute of Architects.

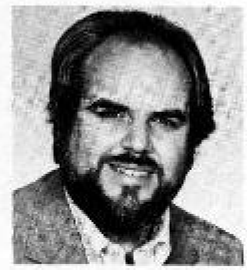
His appointment was made by the AIA Board of Directors and announced by AIA President George M. Notter, Jr., FAIA.

An integral part of the AIA Design Commission, the Housing Committee focuses on national and regional issues involving design quality, costs, neighborhood quality, zoning and density. It is also charged with exploring the public commitment to housing and public-private partnerships.

Evans has been a regular contributor and consultant to the housing industry since forming The Evans Group eight years ago. He specializes in architectural design and environmental planning as well as market analysis, economic feasibility and project coordination.

A graduate of the University of Miami, Florida, and former associate with Berkus Associates of California and Schweizer Associates of Orlando, Evans has established a team of over 50 planners and designers working from Florida offices in Orlando and Coral Gables.

In the past twelve months, The Evans Group has earned 38 major design and planning awards for its residential and non-residential project work in twelve states.



Evans

Member News

The **University of Florida's** College of Architecture has chosen two new assistant deans to oversee its instructional and research activities. **Professor Edward E. Crain, AIA,** will administer the college's instructional activities and the research activities will be directed by **Professor Richard H. Schneider. Thomas D. Montero, AIA,** has just joined the Central Florida firm of **HHCP/Architects. Montero** was formerly with **Greenleaf-Telesca** in Miami. **Gee & Jenson** Engineers-Architects-Planners Inc. has begun design of Greeneway Plaza, a 23,000-square-foot visitor center and truck plaza at the intersection of S.R. 46 and I-95 in Brevard County. **Spillis Candela & Partners** in Coral Gables has received an award for the city of Miami/University of Miami/James L. Knight International Center/Hyatt Regency Complex in Downtown Miami. The building was chosen for the Outstanding Concrete Award by the Florida Concrete and Products Association.

Spillis Candela & Partners together with **Diaz Seckinger & Associates** of Tampa has been selected for the design of new facilities at Tampa's Veteran's Hospital. **G. Phillip Dolan** is the new Vice President of Marketing at **Spillis Candela. Schwab & Twitty, Inc.** of Palm Beach have received two National Builder's Choice Awards for two of their projects. The projects were Esplanade, a residential tower on the Gulf in Naples and the North Palm Beach County Senior Citizen's Center. The Builder's Choice Awards are sponsored annually by **Builder** Magazine and the National Association of Home Builders. **"Who Beat the Evans Group?"** was the headline in The Miami Herald after the Florida-based architects and planners literally ran away from the competition in the first annual **Fame** awards, taking a total of 16 architectural design awards. **Fame** (Florida Achievement in Marketing Excellence) recognized achievements in a number of areas including architecture and the **Evans Group** won six first place awards.

William Morgan, FAIA, presented a program entitled "Shaping Space" to the Palm Beach Chapter AIA at their December meeting at the Henry Morrison Flagler Museum. In recognition of fifty years of support, the University of Florida Department of Architecture has dedicated its 1983 Yearbook to **Andrew Ferendino, FAIA. Ferendino** is a 1933 graduate who began his professional career in association with **Russell T. Pancoast.** In 1978, **Ferendino** resigned from his position as Chairman of the Board at **Ferendino Grafton Spillis Candela.**

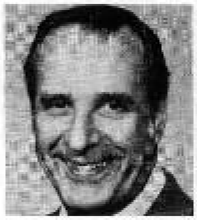
Hunton Shivers Brady Associates in Orlando has named three new associates to the firm. **Craig Rader, AIA,** has been with the firm since 1979 and is currently assigned Project Management, Construction Supervision and Plans Review.



Rader



Pryor



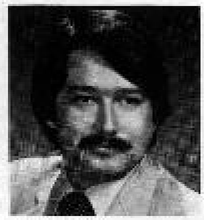
Von Gunten



Skurow



Gooch



De Quevedo

Fred H. Pryor, Jr., AIA is a Project Architect who has been with the firm since 1982 and **John H. Von Gunten, AIA,** is Project Manager of the Medical Facilities Consultants, a Joint Venture of **Hunton Shivers Brady** and Tilden, Lobnitz and Cooper, Inc. **Charlan Brock Young & Associates** of Orlando has been awarded the design of a 140 townhome project called Riverwood Landing which is sited on the banks of the Econolockhatchee River north of Orlando. The site plan includes an eight-acre, park-like environment that will feature tennis courts, nature bridge, canoe marina and a unique elevated clubhouse.

The Haskell Company in Jacksonville recently completed construction on The Grande Boulevard in the Deerwood residential community in Jacksonville. The project consists of a two-level, 289,000-square-foot enclosed specialty mall. It was designed, engineered and constructed by **Haskell,** as was The Dunes Club at Amelia Island, a 450-unit condominium on the Atlantic Ocean which will have its first phase of apartments ready for occupancy in May. The U.S. Navy's first double-deck pier, designed by **Gee & Jenson** of West Palm Beach, may become a prototype for future pier construction. This new pier will eliminate much of the congestion which occurs on existing single deck piers as well as offering improved service to fleet surface combatants. **Gee & Jenson,** Engineers-Architects-Planners have also completed designs and construction documents and construction has begun on new buildings for the Manatee County Port Authority. New construction includes an operations and maintenance building. **Jay N. Edwards** has joined **Briel Rhame Pointer & Houser, Architects** of Titusville as Manager of Construction Services. **Jack F. Wills** has been appointed Manager of the Architectural Division for that firm and **Ray Patenaude, P.E.** has been appointed Manager of **Briel's** Computer Aided Design Branch.

HHCP/Architects is moving from Winter Park to Maitland to occupy their new corporate hedequarters building. **Alan Helman,** President and Managing Partner, says that the firm has designed the ideal office for itself. The building is 16,000-square-feet with offices arranged by departments around the perimeter of the building. Blueprint and copying areas are strategically located within the building and there are seven word processing stations specifically designed for **HHCP's** computers. There are twelve foot ceilings in the drafting room with exposed mechanical systems to create a high tech look. The new building houses the company's 50-plus staff with space to extend in the future.



HHCP Office Building

Walter Martinez, AIA, Vice President of **Russell, Martinez, Holt, Architects, Inc.** in Miami spoke to "Forum," the National Convention of architectural students associated with the AIA during their annual meeting in Atlanta last November. **Martinez** addressed the group on the subject of Equal Opportunities to Minority Students. **Richard C. Skurow, I.D.S.A.,** has been named Executive Director of **Schwab & Twitty** Architectural Interiors and Environmental Graphics, an organization which has evolved from **Schwab & Twitty Interiors. Skurow** is the newly elected chairman of the Southeast Chapter of Industrial Design Society of America. **Jorge L. Bouza** and **Julio Ripoll** have been named architectural designers for the Coral Gables office of **The Evans Group.** The appointments are in keeping with planned office expansion.

Nancy Cameron-Egan joined **Interspace Inc.** as Vice President and Director of Marketing. Ms. Cameron spent two years with **CRS** in Houston. She is a graduate of the University of California with graduate work completed at the University of Paris. **Doug Gooch** is the new Director of Marketing for **Architects Design Group of Florida, Inc.** in Winter Park. **Gooch** is a graduate of the University of Kansas and a nationally recognized speaker on "Marketing Communications for the Design Professional." The Faculty of Architecture, University of Maryland is featuring an exhibition of the work of **John Ames Steffian, FAIA,** of **Aragon Associated Architects. Spillis, Candela and Partners, Inc.** of Coral Gables has been selected as a finalist in the New Orleans Museum of Art Expansion Design Competition. Six finalists were chosen from among 192 entries from all over the country. The selections were made by an eight member jury chaired by Henry C. Cobb, FAIA, of I.M. Pei and Partners. The **Spillis Candela** design team is composed of **Julio Grabiel, Rolando Llanes, Rafael Portuondo, Jorge Louis Trelles** and **Luis Trelles. Carlos Ruiz De Quevedo, AIA,** has joined **Architects International Inc.** as a principal. **Ruiz De Quevedo** will serve as Vice President and will oversee the activities of business development.

LETTERS

Dear Editor:

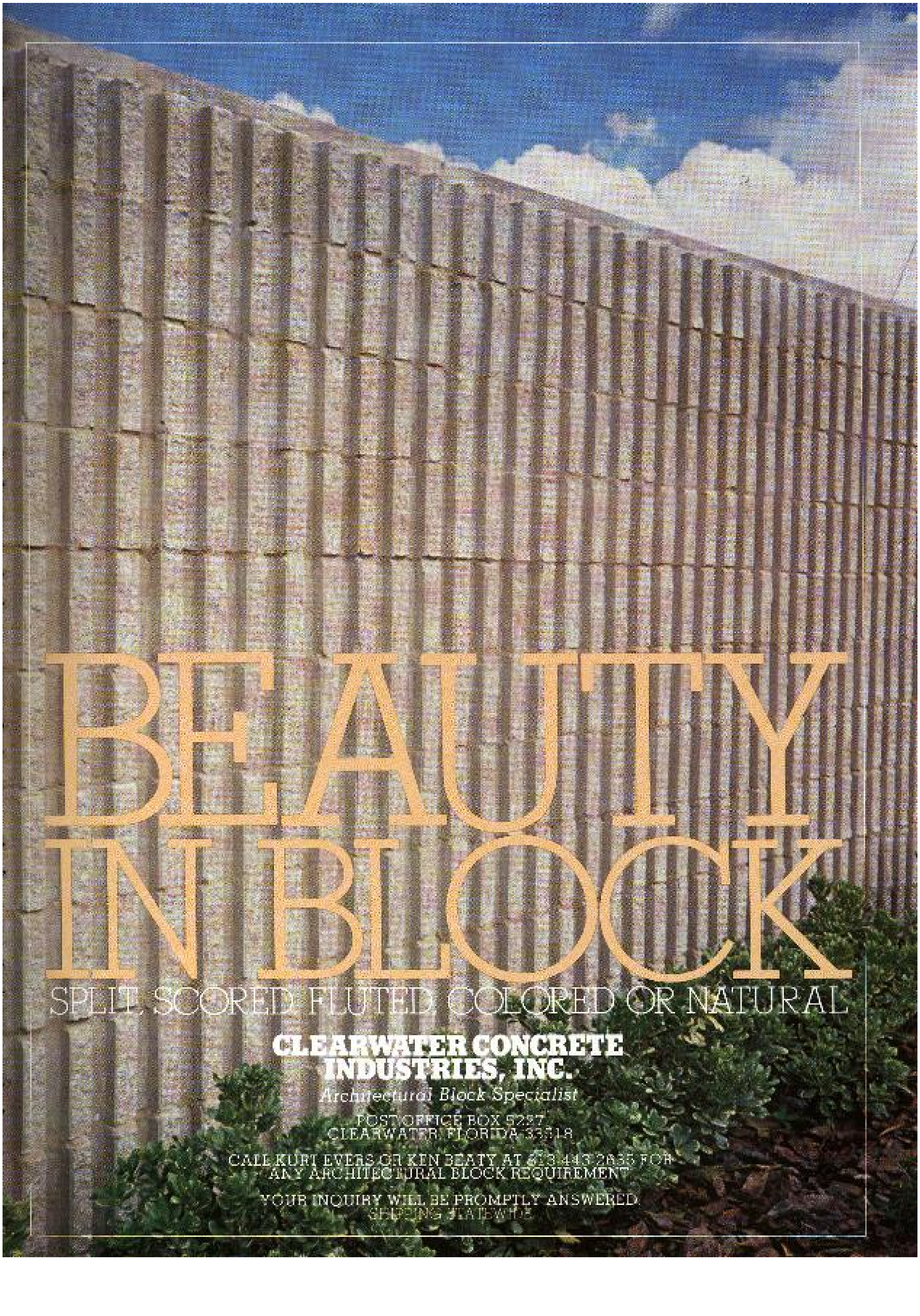
The 1983 Fall issue of *The Florida Architect* contained an article entitled "Prarie School in Puerto Rico: Antonin Nechodoma" written by Thomas S. Marvel, FAIA. A photograph of the "Wilson House" in Tampa and several statements referencing the home, state that Nechodoma is the reputed designer.

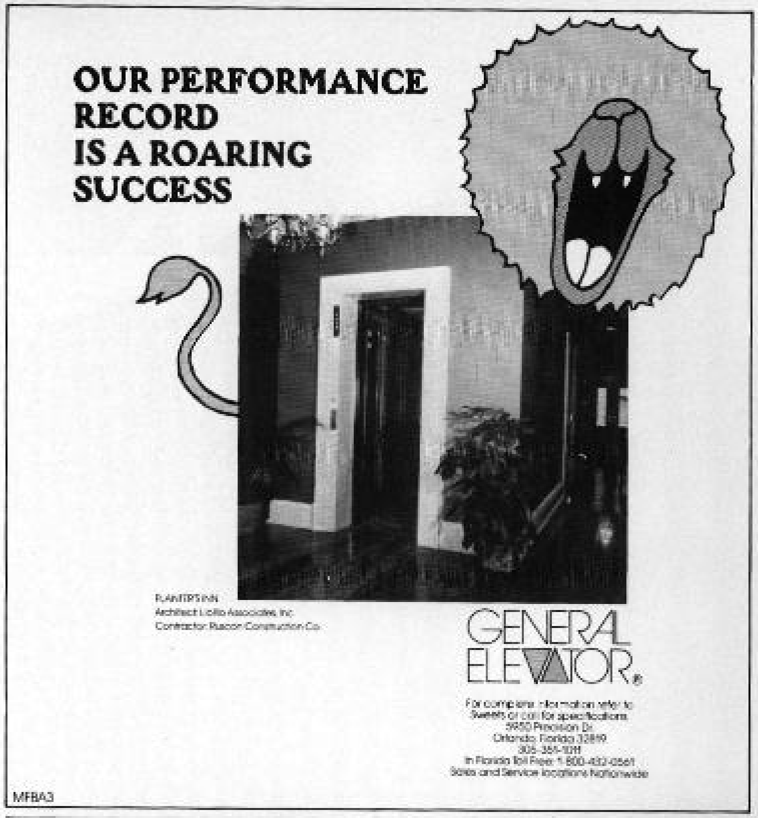
It seems there is quite a bit of confusion concerning the Architect; apparently starting with an article in *The Florida Architect*, January 1970 titled, "Florida's Heritage Trail" written by Blair Reeves.

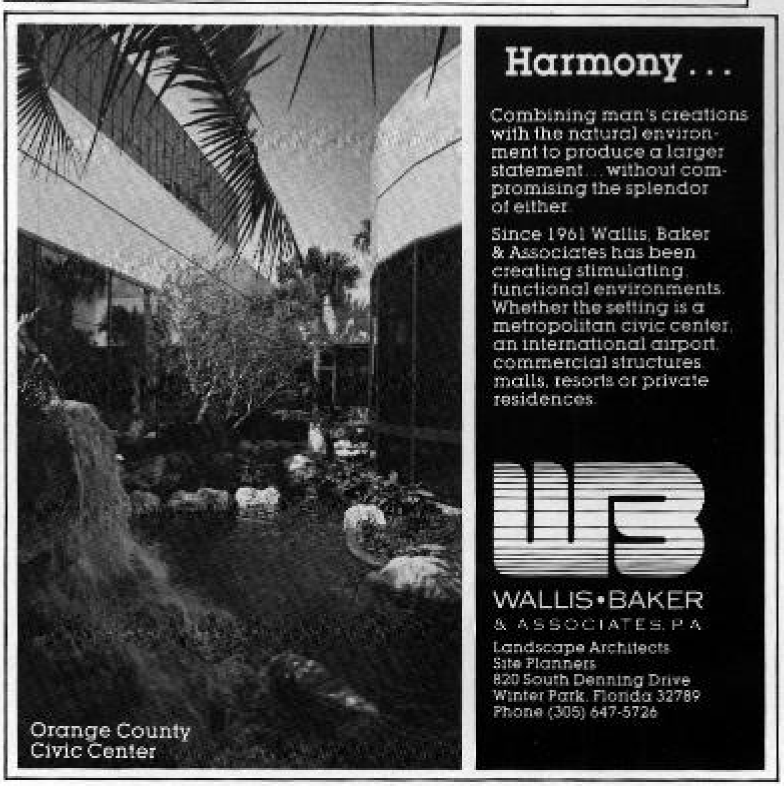
To hopefully clear up any further questions concerning the designer, I have enclosed a copy of the front page from the original Specifications. The house was originally designed for Henry Leiman during 1914. The architectural firm is Bonfoey and Elliott, which my grandfather, M. Leo Elliott, founded upon arrival in Tampa. M. Leo Elliott, was also a charter member of the Florida Association of the American Institute of Architects and his registration number was five (5).

I would appreciate your printing a correction to this article in your next issue of *The Florida Architect*.

Yours very truly,
Lynn Elliott, IBD


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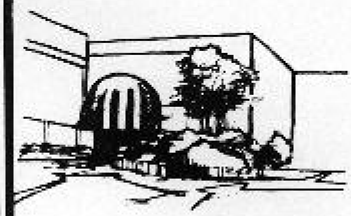
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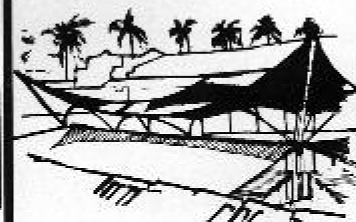
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THOUGHTS ON EXISTENTIALISM AND ARCHITECTURE

Scott Akins

If Aldo Rossi is a rationalist, which could be debated, then he is inherently at odds with existentialism.

As a theory, rationalism deals with truths based on reason and the mind, not on experience. Most rationalists utilize logic and pure geometry as self-evident truths that do not depend on the external world. In contrast, existentialism and phenomenology are dependent on real-life situations, which Martin Heidegger consistently refers to as "things" that are part of the world environment.

In Aldo Rossi's architecture, which he terms "autonomous architecture," he is moving from the known reality of the world into one where the "image" is left to be read on its appearance only. According to Francisco DalCo in his essay on "Criticism and Design," an understanding of Aldo Rossi's work can be achieved with reference to one of Nietzsche's writings titled, "The Will to Power as Knowledge." In this writing, Nietzsche says "Appearance" belongs also to reality: it is a form of its being.

This statement views the world as "fundamentally divided; in such a world all acts—of production, of formation, of appearance—can only express their own reality, never those of others." DalCo then reveals the intentions of his polemic, that the autonomy of Rossi's architecture is an alternative to reality, where the interpretation of its appearance can become an infinity of realities. This suggests that the observer is now given a freedom to interpret the images in any fashion, but, in my opinion, all images are tied to some form of historical and cultural association. Rossi prefers to clear the slate and start all over.

DalCo feels that the relationship of criticism to design has always been implemented by analysis of a form of representation and "simply seen as a process that mechanically represents ideology . . . it becomes unreadable for itself, and thereby unreadable as its own form of reality." Where this leads in regard to Aldo Rossi is the obvious inability to criticize his work within traditional methods of analysis. Instead of integrating different areas of interest, this method demands total separation. Norbert-Schultz has criticized this concept of "autonomous architecture" on another basis; that its relationship with human life is not explained. "What is most disturbing in Rossi's book (The Architecture of the City) is in fact the total absence of man."

Many are critical of Rossi's architecture for its disregard for local context. According to the philosophical basis for his work, the existing reality is not something he cares to generate his work from. Rossi alludes to the genesis of his work in the following statement, "In my architecture progress does not and cannot exist; there is only a process of descriptive classification of my idea of architecture." Norberg-Schultz's theoretical stance again is in total opposition to an architecture created merely by a process of ideas.

One element that both Rossi and Norbert-Schultz have emphasized in their writing is typology. Schultz's concept of typology relates to architectural structure and composition that invokes "gathering." Rossi takes a somewhat mysterious viewpoint where he does not develop the origins of the concept but states, "The type is the very idea of architecture, that is, what is closer to its essence." Formally, Rossi's architecture is composed of separate types that do not inflect upon one another but maintain their most simple form. Schultz further comments on this reluctance, stating ". . . he does not investigate the structure and character of places. Therefore, he cannot approach the problem of adapting type to local circumstances. The types are instead used as fixed 'models' which participate in a mechanistic ars combinatoria."

According to Anthony Vidler in an article on the production of types, he has distinguished two separate ideas relating typology to the production of architecture. The first is the "neoplatonic theory of original ideal types that stressed the existence, a priori, of suitable forms in nature and in architecture either in geometrical or constructional perfection." This type theory has been demonstrated by Quatrmere de Quincy who felt the eternal type of architecture was the primitive hut, and its perfect achievement was the Greek Temple. In other words, this viewpoint of typology was in already existing forms without the need for adaptation to new conditions. Rossi tends to follow this approach as exemplified by his maintenance of perfect forms. It also relates to Rossi's discontent with consumption and production society that has created programmatic requirements in architecture that cannot function without altering these early types.

The second type theory according to

Vidler, was developed by Durand, who was primarily interested in the ability to modify existing types in order to be economically efficient in satisfying new programmatic requirements. By the middle of the 19th century both theories had merged, represented by a rational conception of structure and program utilized by Viollet le Duc and Labrouste. As the technological age arrived, the theory of type merged into the process of mass production, culminating in such building forms as the Unite d' Habitation by Le Corbusier. What this leads to in relation to Aldo Rossi is a rejection of mass production and a return to pre-industrial society where architectural topology can retain its platonic essence. It could be argued that it is appropriate for his architecture to be "autonomous" because society, as it exists, is less than ideal.

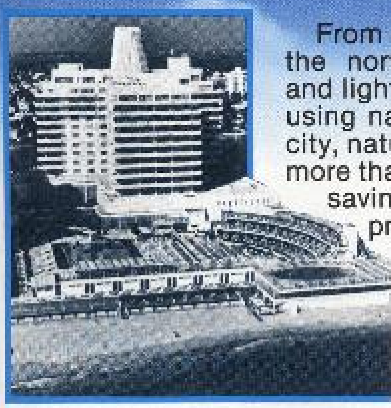
Rossi's architecture tends to emphasize life's bare conditions as a prerequisite for "being." There is an architectural implication of minimal shelter in many of his projects. Rossi has stated that many of his forms and images have been inspired from rural farmhouses and silos along with factories and arcades. These building types generally offer minimal shelter primarily for economic reasons. The transformation in one's visual interpretation from farmhouse to one of Rossi's works is difficult. To many, his buildings look like prisons or mental hospitals. According to Rossi, when society has removed these engrained images, it will be a better place. This may be true, but it is difficult to disregard historical associations that cultures have instituted. Humanity does not exist in a vacuum, but in a continuously evolving structure where the meaning of built form or architecture has sources in history and tradition. Rossi prefers an "autonomous architecture" because he feels that most recent historical relationships are poisoned by identification with a consumer society. But, is architecture the appropriate medium to express the "nihilism of consumer society?" Does visualization of this idea in built form change society's values or does it merely inhibit life for the individuals abiding in this architecture? Architecture should not promote conformity to a certain status quo, but should allow individuals to be expressive and unique. This is what makes life rich and liveable. In Rossi's worker housing scheme in Gallartese, I see an infringement on people's will to be unique. A monument would be a more appropriate place to express Rossi's ideas about society than a place where people have to live. This is possibly one reason why Rossi finds such significance in monuments in the urban context. They do not have to deal with any of the functional and sensitive, emotional requirements of a living environment.

An architecture that is sympathetic with existential philosophy will attempt to be expressive of man's creative will and invite spontaneity in both its utilization and interpretation. Everyday life conditions and situations are emphasized to ensure permanent human relationships, not just permanent architectural structures. The richness of life cannot be extinguished only to be replaced by a monotonous repetition of window openings and a stripping of all texture and ornament. Mankind does not have to live with a loss of texture and enrichment in his material world. "Meaning" in life, a fundamental human need, must be addressed in architecture as a communicative device. This communication is not found in architecture formulated under an "autonomous" schema. Architecture should create an expressive language that will reinforce tradition and continuity in an interactive, culturally based society composed of unique, free individuals.

Scott Akins *is a student of Architecture at the University of Florida.*

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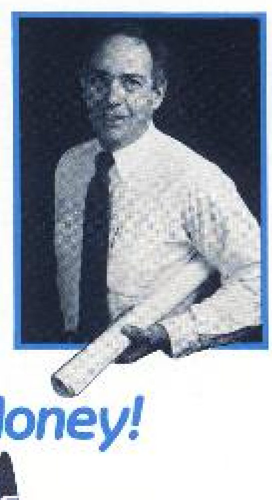






Light industries should look into the benefits of cogeneration, using natural gas to produce the heat they need, and putting excess heat produced to work generating electricity. Fleets of commercial vehicles could all run more economically on compressed natural gas, producing far less pollution in the process. And speaking of pollution, natural gas is by far the most sensible fuel for Florida's sensitive environment. Since natural gas produces none of the detrimental hydrocarbons that are released when oil and coal are burned to generate electricity, the use of natural gas instead of electricity helps preserve the environment so important to the future of Florida while it saves on energy costs.

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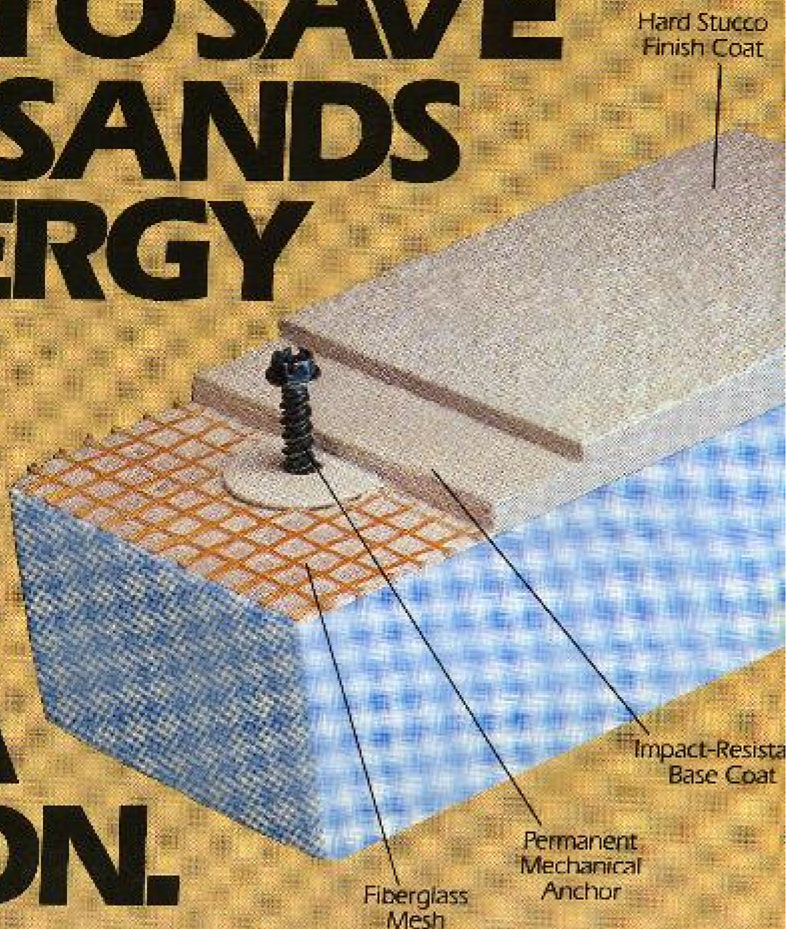


Gas Gives You More For Your Money!

Get The Facts From Your Local Natural Gas Company

Florida Natural Gas Association

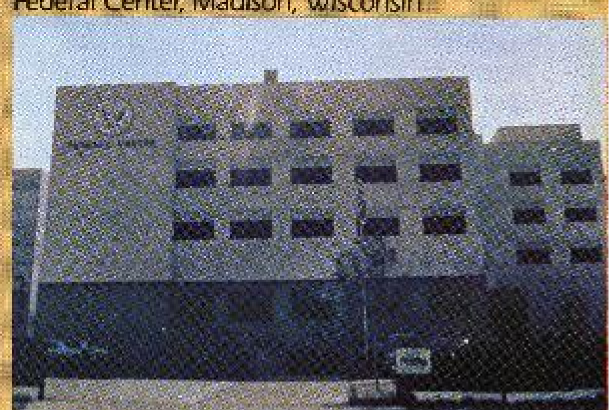
HOW TO SAVE THOUSANDS IN ENERGY COSTS AND LOOK LIKE A MILLION.



Federal Center, Madison, Wisconsin



BEFORE



AFTER





Boards of STYROFOAM brand insulation are set in place

Fiberglass mesh is applied, mechanical anchors are attached



Base coat is applied with trowel



Finish coat is applied



STYROFOAM Brand Insulation

Insulate your commercial building and give it a facelift with one of these proven systems incorporating STYROFOAM brand insulation and a hard-coat stucco finish from SENCON SYSTEMS INC. or INSUL/CRETE.

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Long-term savings, short payback. The performance-proven combination of STYROFOAM brand insulation and hard-coat stucco on exterior walls reduces energy costs substantially, so the system can pay for itself quickly. And you'll enjoy the savings that come from lowered bills year after year.

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Finish strong with stucco. A base coat of polymer—modified cement is applied to the mesh. Then the finish coat is added in the color and texture of your choice.

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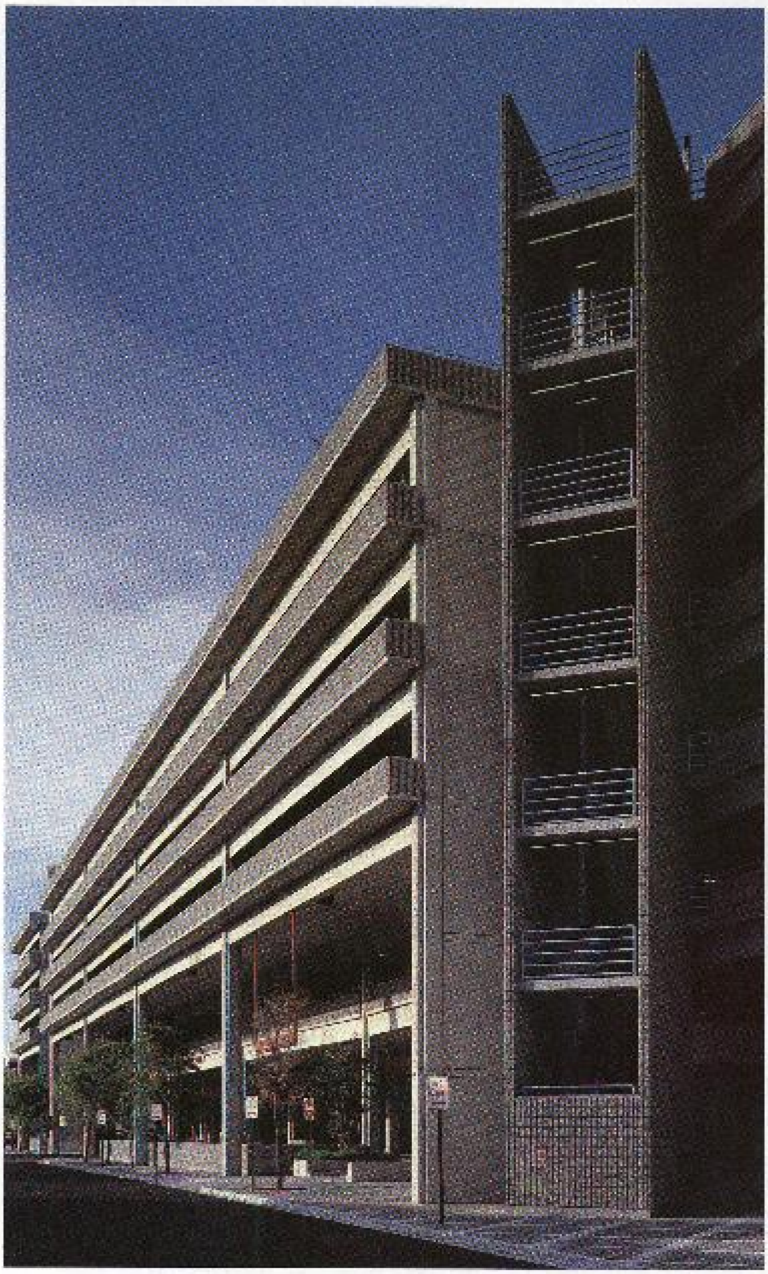
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CITY PARK: CREATING BEAUTY OUT OF NECESSITY

Don Singer



Exterior of City Park shows siting and position with regard to the streetscape. © 1983 *Wolfgang Hoyt Esto.*

PROJECT:	*City Park—Urban Plaza & Municipal Parking Garage*
ARCHITECTS:	*Office of Donald Singer*
PROJECT TEAM:	*Donald Singer, AIA* *Wayne Jessup, AIA* *Craig Berry, AIA* *Lynn Aubel, AIA* *Ken Williams, AIA* *Steve Gray, AIA*
GENERAL CONTRACTOR:	*Dugan & Meyers Construction Co., Inc.*
MECHANICAL ENGINEER:	*Wilbur Smith & Associates*
STRUCTURAL ENGINEER:	*deZarraga, Donnel & DuQuesne*
LIGHTING CONSULTANT:	*Douglas Baker*
SIGNAGE & GRAPHICS:	*Bugdal Graphics*
TRAFFIC & PARKING:	*Wilbur Smith & Associates*
SPECIFICATIONS:	*Tecon, Inc.*
LANDSCAPE ARCHITECT:	*Bradshaw & Associates*
OWNER:	*City of Fort Lauderdale*

In 1978, the Commissioners of the City of Fort Lauderdale made a commitment to the City's downtown, a commitment to assist in its rebirth by constructing a parking facility which would provide interested developers and government agencies with parking necessary for viable downtown development.

The site, selected in conjunction with the Master Plan of the Downtown Development Authority, encompasses one entire city block and half of another. It is bisected by a street which is a major traffic feed into and out of downtown. Surrounding the site are locations for future commercial office buildings on the north, south, east and west as well as sites for a major regional library at the northwest corner, an art museum at the southwest corner, an existing church at the northeast corner and an existing community college downtown campus at the southeast corner.

The structure needed to become a connector-street to parking, automobile to pedestrian, pedestrian to destination, one portion of downtown to another.

Parking structures have been, by

their very nature, buildings which people love to hate. The building type has been strongly associated with the very worst of urban blight, with de-humanization of the environment and with the aura of danger to personal safety. The prospect of designing such a building brought more than the normal feelings of concern to this architect. The urban dangers could certainly be brought into focus if their reality was not dealt with in the design process.

The important factor which seems to be omitted from traditional parking structures was that of the "Human Being." In order to create a formula for the most efficient parking building, garage builders had too often forgotten people.

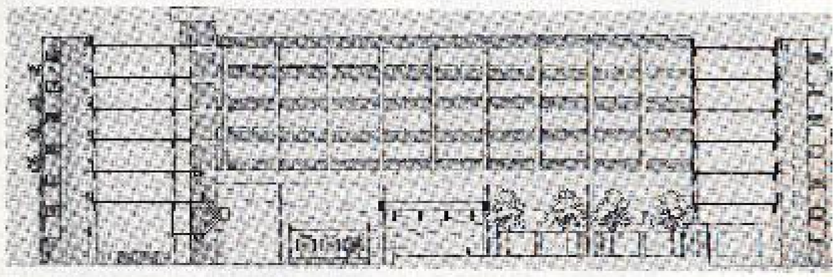
The entire idea of City Park was centered on bringing people back into the downtown, albeit with their cars. Those people who had regarded the downtown as a daytime obligation which had to be endured, but certainly not enjoyed, needed some consideration. If that was to be the motivation, those "forgotten people" had to be given some attention in the program for the design of the building.

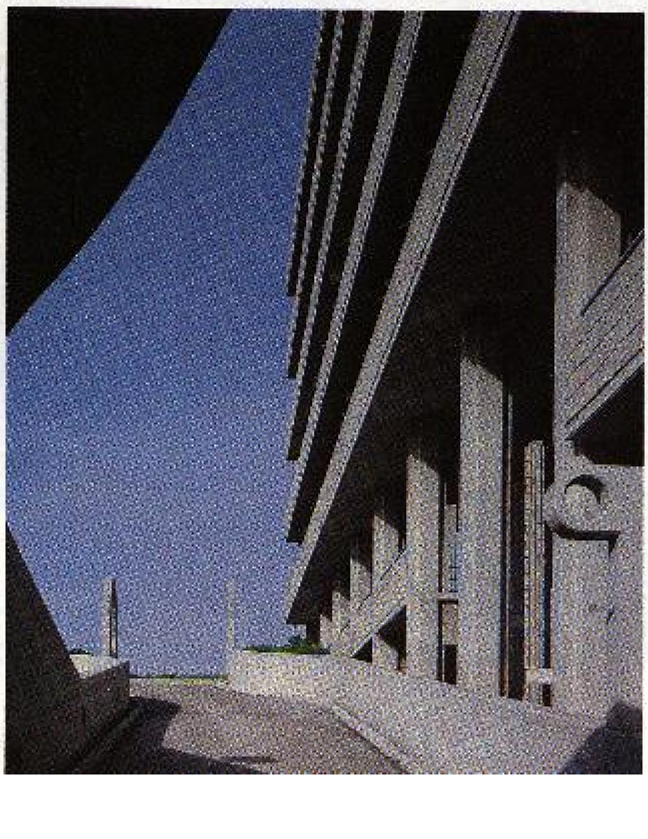
The plan of the structure was fitted into the site using a nine-foot module compatible with a standard parking space, a 27-foot driving lane, and a 63-foot parking bay. In order to minimize the impact of the mass of the structure (the client was aiming for a 2000 car capacity), the first major design decision raised the second level to 20 feet above street grade, nearly three times the typical "efficient" response. The result was the creation of a sense of openness and, in effect, a feeling of welcome rather than one of being shut out or shut off. Man was given precedence over the automobile.

The building virtually filled the site, a necessary result of the need to ramp cars from level to level. To prevent the pedestrian at grade level from feeling pressed to the street by the massiveness of the structure, the second level was set back an additional 18 feet. This same approach was taken with the seventh level with the result being that the visual bulk of the building is dramatically reduced.

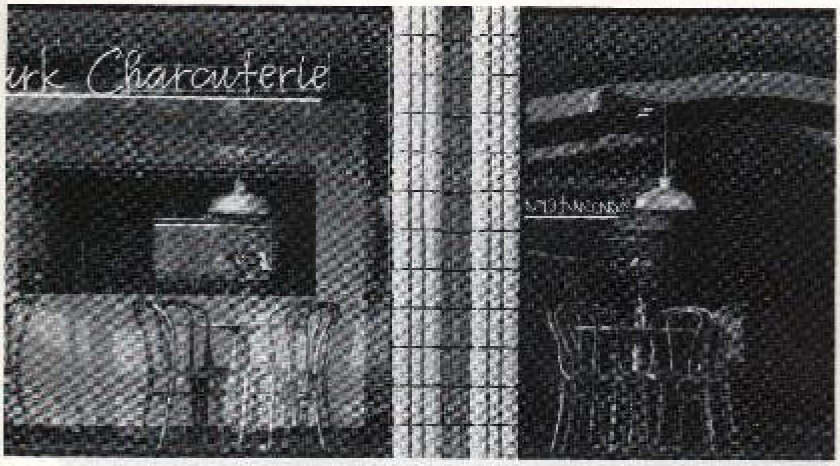
However streamlined, we were still dealing with a building 300 feet wide and 500 feet long, dimensions of such magnitude that natural light would never find its way to the core. Two light wells, each 27 feet by 180 feet, designed to bring natural light in and keep out the demons, real or imagined, were carved into the plan at the







Top: Public spaces within City Park make the building a "people space" as well as a parking space. **Middle:** Elevation of City Park; **Right:** Exit ramp shows sculptural quality of the building from the driver's vantage point. *Photos © Wolfgang Hoyt Esto.*





Top: One of the amenities which makes the City Park an exciting public space is Park Charcuterie, an eatery situated on ground level. **Above:** Bright graphics liven the inside of City Park and give it an appealing humanistic quality. *Photos © Wolfgang Hoyt Esto.*

third points. With this same idea in mind, the only side of the building which abutted another property line was held away with one of the two express ramps which carry cars from grade to level two. This made it impossible to build up close to the parking bays and shut out the critical light.

The glass-faced elevators, which carry people to grade and back to their cars, are located in the light wells, providing activity for the pedestrian below as well as giving the rider the visual experience of moving vertically through the building.

Another major effort was put into the creation of grade level amenities within and around the structure which establish the space as an active, contributing entity in the downtown fabric. At the north end of the grade level, an area was designed as a functioning commercial plaza, with shops to be leased by individual tenants for shops which would serve the parkers.

The plaza, placed on axis with the entry to the church and aligned with circulation patterns to the library and one of the office towers, offers the availability of an urban gathering place. The second level parking is omitted over the plaza, creating a 30-foot high public space accentuated by the verticality of the light well which opens to the sky. The detailing in and around the plaza—concrete tables and stools with built-in lights and a grouping of glass block fountains intended to mask the auto noise—is designed to break down the scale, for people.

The same thinking went toward similar amenities in other areas of the site . . . a landscaped walkway through the building along the trafficway, complete with table and stool settings, sidewalks paved with concrete paver blocks as a textured scale element, signage designed to direct the pedestrian as well as the driver, stairwells which are fully open to view from the street.

The special quality of City Park is the feeling it is able to give back to the people who use it. It is a building for people that is also a place to park automobiles.

What makes this building significant is the fact that the prospect for "another parking garage"—a critical element in any growing urban environment—was metamorphised from its typical anti-human nature into an activity-supporting center, a city-pedestrian hub. It is design giving back to a community as much, or more, in terms of public interest and amenity, than it takes away in terms of open space. Architecture can be an anticipation of Life.

Don Singer, AIA, *is President of Donald Singer, Architect, P.A., in Ft. Lauderdale. City Park received an FA/AIA Award of Excellence for Architecture in 1983.*

JAIME SCHAPIRO AND THE GALLERY AT BAY HARBOR

Diane D. Greer

PROJECT:	*The Gallery at Bay Harbor Bay Harbor Islands*
ARCHITECTS:	*Jaime Schapiro AIA & Associates Architects Planners*
CONSULTING ENGINEERS:	*Weitz & Tsang Structural, Mechanical Electrical & Air Conditioning*
CONTRACTORS:	*Group III, General Contractors, Inc.*
OWNER:	*The Gallery at Bay Harbor Condominium Association*

Jaime Schapiro, AIA, was born and educated in Chile, but in 1964 he was awarded a government scholarship at Kyoto University where he studied under Tomoya Masuda, with whom he worked on the entrance design for Expo 70 in Osaka.

Today, in his Miami office, architect and planner Schapiro says he learned a kind of honesty from the Japanese style of building and that the balance of form, function and economy are an inseparable part of the design process.

"Someone asks me," Schapiro says, "what are our strengths within the firm?" I answer that our greatest strengths are in programming which is always the prelude to good design. The firm develops a program of space affinities and requirements. This is more than just making a list of what the client wants. It is determining the client's needs through research . . . and probing.

Schapiro describes his firm as a team of specialists trying to cover a broad range of design. "People involvement" is an important factor in the office and the client is a part of the team. Schapiro believes that if you involve all the users . . . in planning, programming and conceptual design . . . you move at a better pace.

Taking cues from the maturing concepts of organized space and honesty in design, Schapiro is known for working tightly defined spaces behind hospitable



Entrance foyer and waiting area outside Architect Schapiro's office.

facades. The result, some say, is typical of the "Florida architectural style" . . . a progression of spaces that go from public to most private. It seems to be a kind of stylistic demarcation necessary to give the not-quite-urban, not-quite-suburban neighborhoods their bearings.

One such building which makes the transition from public to private in a particularly exiting way is The Gallery at Bay Harbor, an 8,000 square foot condominium/office building designed to serve four construction-related clients, a developer, a builder, a real estate office and Schapiro's office.

The architect's design criteria were to create an energy-efficient, functional and character-strong office building on a relatively small urban site. Aesthetically, clients requested a building style both akin to the provocative Florida landscape, while projecting a stable corporate image for occupants.

Considering the small size of each floor, another design consideration was the creation of open floor space that was free of columns. This encouraged flexibility in interior design since clients had a "free floor" to work with.

The building also had to be private, including access by private elevator.

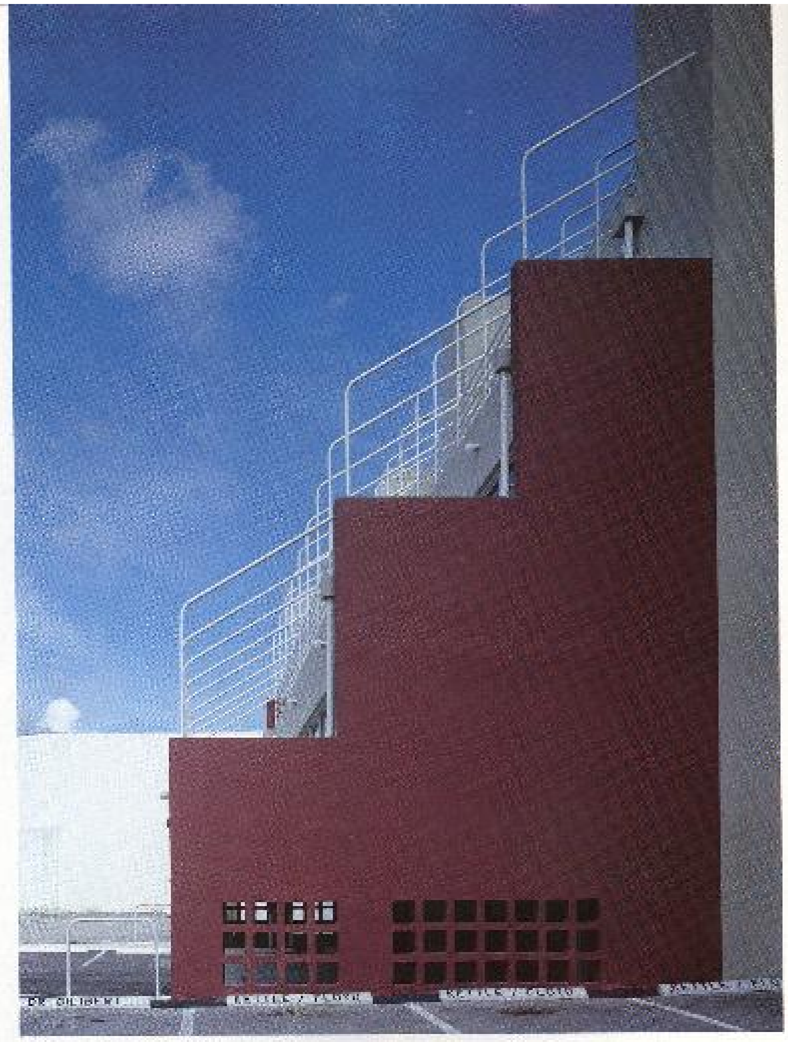
On the outside of the building, the architect created an entry plaza since an existing zoning ordinance provided a special bonus of increased construction area for all space devoted to public use.

The 6,700 square foot site is located on the main street of an affluent community with high fashion stores, restaurants and art galleries. Its facade faces the main street and its terraces overlook a residential neighborhood.

To solve the problem of the small space within which the architect had to work and at the same time make the building impressive, a funnel effect was created by stepping back the floors of the building from top to bottom, simultaneously creating the dramatic public space at street level to be used as a lobby and sculpture garden for passers by. As a result of stepping back the floors, terraces were created to visually enlarge office space, while providing workers with an opportunity to enjoy nature.

Great attention was given to the energy efficiency of the building. Besides the use of cooling terraces, tinted glass and solar reflective glass, the terraces are protected from Southern exposure with moveable canvas shades as energy control devices.

The Gallery at Bay Harbor is constructed of exposed reinforced concrete and precast concrete joists with stuccoed concrete block walls, exposed fluted concrete block, solar reflective gray glass



Above: East elevation of the building showing the steps which produce the back terraces. Metal tubing serves the dual purpose of handrail and canopy support. *All photos by Mark Surloff Photography* © 1983

Below: Group III General Contractors conference room.



block on the main facade and tinted gray sliding doors on the rear. Steel pipe rails on the back terraces support the canvas shades.

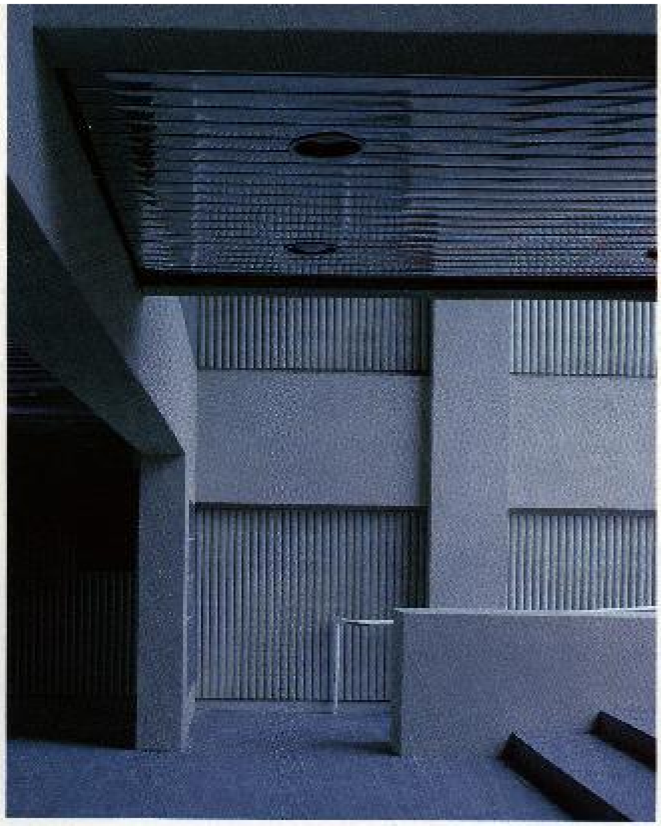
To further enhance the corporate images of those firms residing in the building a formal entrance was created. This entrance is both symbolic and reminiscent of the human scale in a monumental, multi-level space. A portico accentuates the quality of the space in an inviting way.

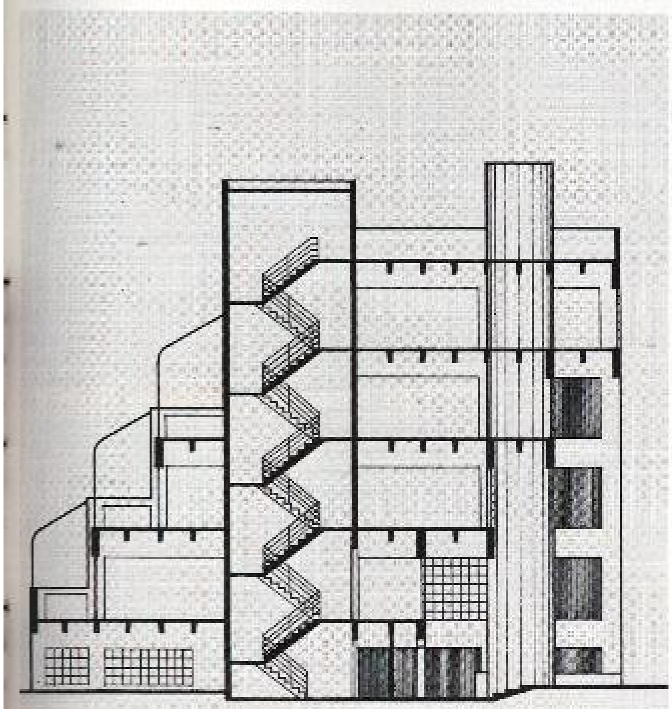
Even the elevator shaft was incorporated as a focus of the building's solidity. It is treated as sculpture and emphasizes the verticality of the building.

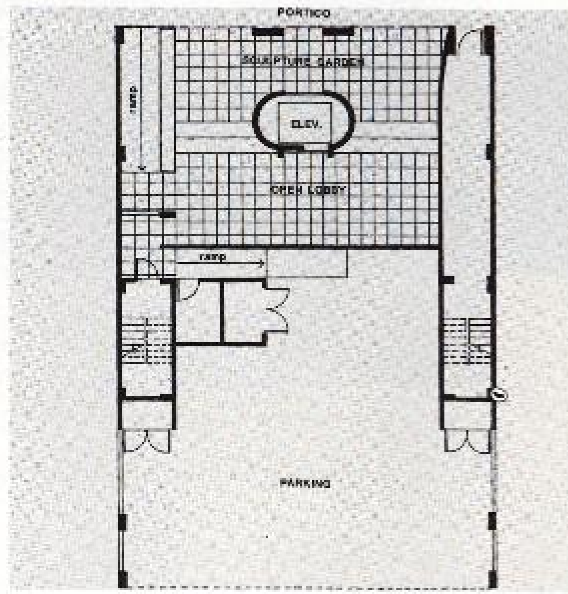
The Florida vernacular was achieved through a careful selection of materials and colors. The building employs concrete stain on stucco and it should hold its color well.

The sculpture garden has no vegetation. Its sleek appearance is expected to contrast with the plush street landscaping currently being incorporated into the Kane Concourse development.

"First and foremost," Schapiro feels, "people, especially in Florida, desire pure, clean form, almost as a receptacle for their dreams — something simple, yet grand which shows how people choose to live."







Top: Detail of open lobby showing handicapped ramp, fluted concrete block interior wall and porcelain tile flooring.
Above, left: Ground floor plan and cross section of the Gallery.
Courtesy of the architect.

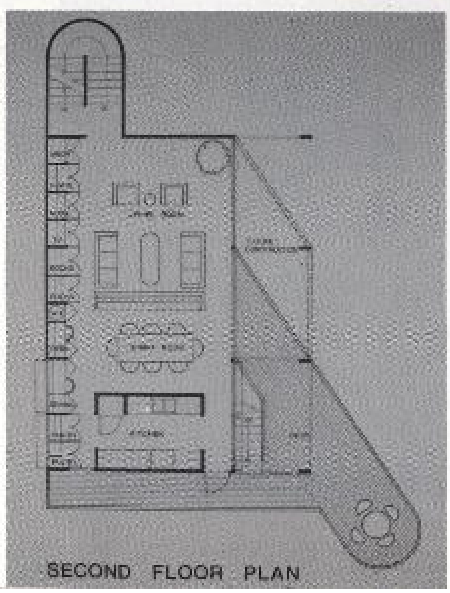
WILLIAM GRAVES: DESIGNING FOR FUNCTION, DELIGHT AND ECONOMY

Diane Greer



Above: The architect's house, built on Santa Rosa Sound in 1974. It is the architect's clear presentation of a sample of contemporary architecture in the region. The house is constructed of 1x4 cedar boards and there is 1,600 feet of living space on the top two floors. *Photo courtesy of the Graves office.*

Right: Second floor plan of the Graves house. *Photo courtesy of the architect.*



As an architect, Bill Graves, AIA, says that his principal reason for being is to provide design solutions containing the essential qualities of function, delight and economy. In Pensacola, the firm of William Graves, AIA, Architects & Planners, is working hard toward that goal under the constraints of a non-compete contract. Now, the firm is growing and commissions are coming in. But, during 1982 and 1983, approximately 70% of the commissions awarded to the Graves office were not directed toward a building as their end result.

Bill Graves is a native of Tennessee. With a degree in Philosophy and English literature under his belt, he attended the University of Arkansas where he earned a degree in Architecture and Urban Planning. He joined Kevin Roche John Dinkeloo and Associates as an architect-in-training before joining Gassner, Nathan and Partners in Memphis as a Project Architect and finally becoming a Principal in the Pensacola firm of Bullock/Graves. In 1981, Graves became the sole proprietor of his Pensacola office.

Today the Graves office is busy with feasibility studies, programming, site selections, promotional brochures and feasibility budgeting and scheduling. Each of these things has enabled the firm's members to expand their role as architects and to grow professionally. Each and every type of commission, whether it resulted in a building being constructed or not, followed the same process through the Graves office . . . identification of the program, the site and the budget. The firm's success with research-oriented projects is credited to its philosophy that the design of any material object or documentary report is basically the same. In each case, before a solution can be reached, the problems and issues must be identified and the entire project must be handled under time constraints and budgetary controls. Each project begins with a thorough "mock-up" of the desired end result with each stage carefully planned and detailed so that the project architect understands his destination before his departure.

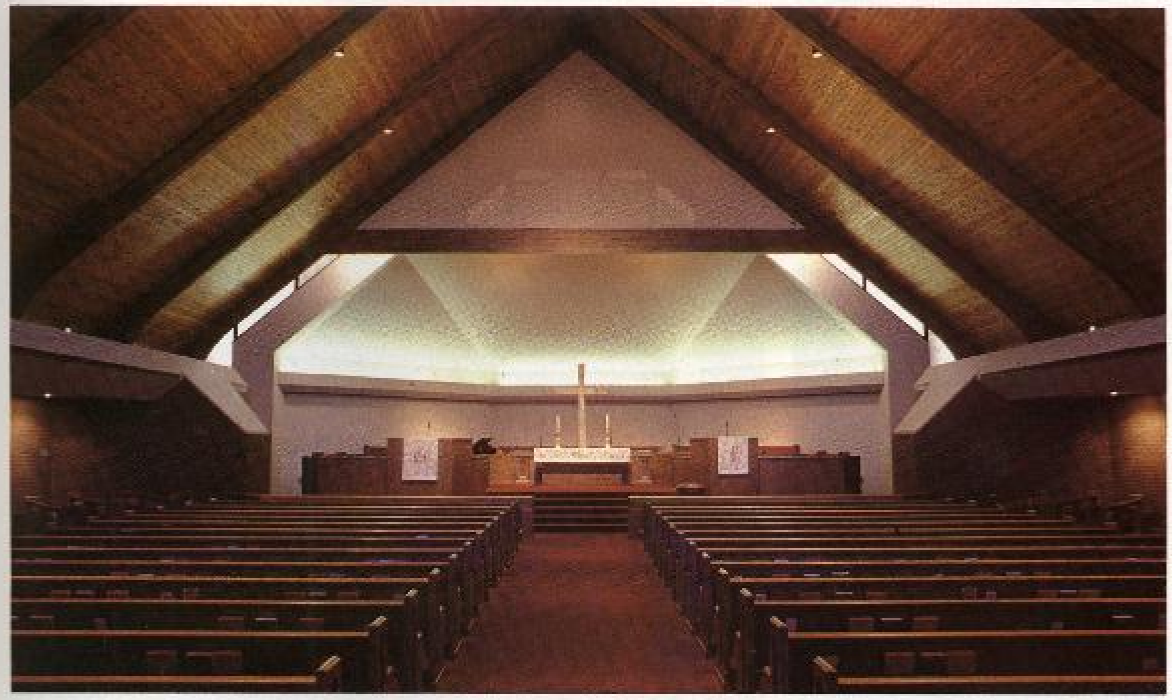
The Graves' office is organized on the traditional Project Architect system. Each project is assigned to a Project Architect who is responsible for all phases of work. Frequent design reviews are held and it is the responsibility of each Project Architect to call these meetings and obtain necessary design approvals. The Project Architect system allows for professional development of the individual in all phases of the design and business aspects of the practice of architecture. The intent of the system is to allow for a broad

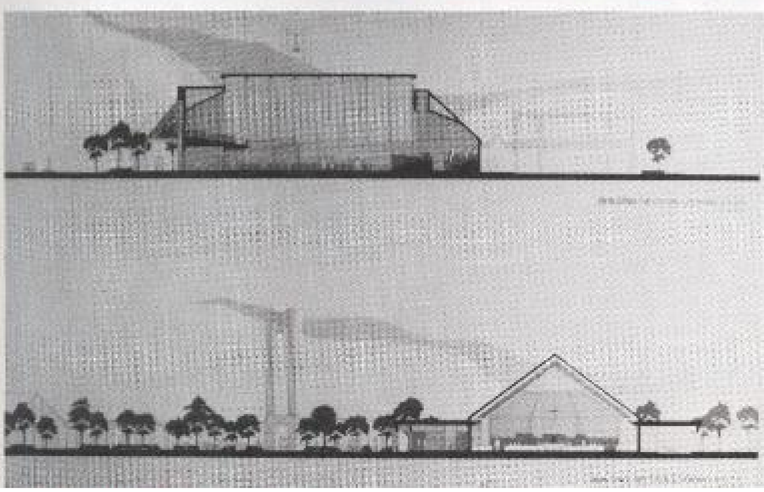
base of knowledge that will lead to specialization as a small office grows. It is designed to retain employees whose knowledge covers all phases of architecture and who will then be prepared to specialize as their own interests dictate. Graves firmly believes that the competitive nature of the decade in which we live suggests the preference for Specialist over Generalist.

The statistics for the Graves' office are comparable to the majority of practices in the U.S. Their goals, in priority, are to create good architecure, enjoy the work and make a reasonable profit. Their secret, according to Bill Graves, is the same one which guided him through his years at Kevin Roche-John Dinkeloo.

"I found myself surrounded," Graves said, "by graduates from what I considered the most prestigious schools, like Harvard, Yale and MIT. Admittedly I was intimidated by the apparent quality and sophistication of their education compared with mine. It only took a short while, however, for the one essential ingredient of persistence to put me in a unique position within the firm. I was one of two people who was transferred from the production department to the design department depending on the types of projects that were in progress. My persistence paid off."

Persistence and perseverance and the willingness to take on a wide variety of projects has paid off for the new firm. As for the future, Graves sees the City of Pensacola as one of the strongest natural resource bases in the nation and it's a City that is enjoying a new and refreshing awareness that good design is good business. This awareness exists in local government and extends to most of the successful business people in the area. Regionally, Graves considers Pensacola the "last frontier" in Florida and he finds that local investors are realizing the potential they have, even though outsiders have apparently realized it for years. Says Bill Graves, "It is extremely exciting to watch the growth in a city that has strong historic overtones and incredible natural resources."





Above: The new sanctuary for the Gulf Breeze Methodist Church is sited next to an existing structure. Construction was $700,000 and the building seats 800 people. To decrease the mass of the structure, the narthex and the choir alcove were defined by separate forms each tucked into a gable end and separated from the main gable by a band of glass. The chancel platform was conceived as a single piece of furniture. *Photo by Alex Irizarry.*

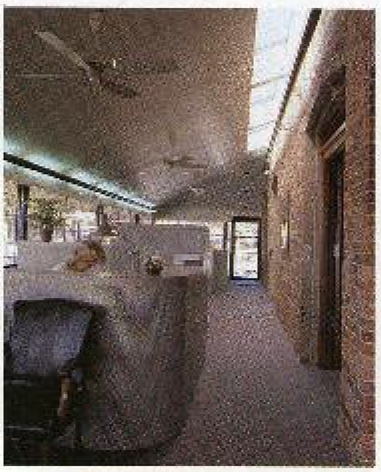
Left: The architect encountered a series of restraints in designing the Gulf Breeze Methodist Church. The irregular shape of the property, an adjacent building and a difficult traffic pattern all had a bearing on the final design. The enclosure of the main sanctuary space was finally accomplished with the use of a fairly predictable glued and laminated wood arch. *Photo by Alex Irizarry.*

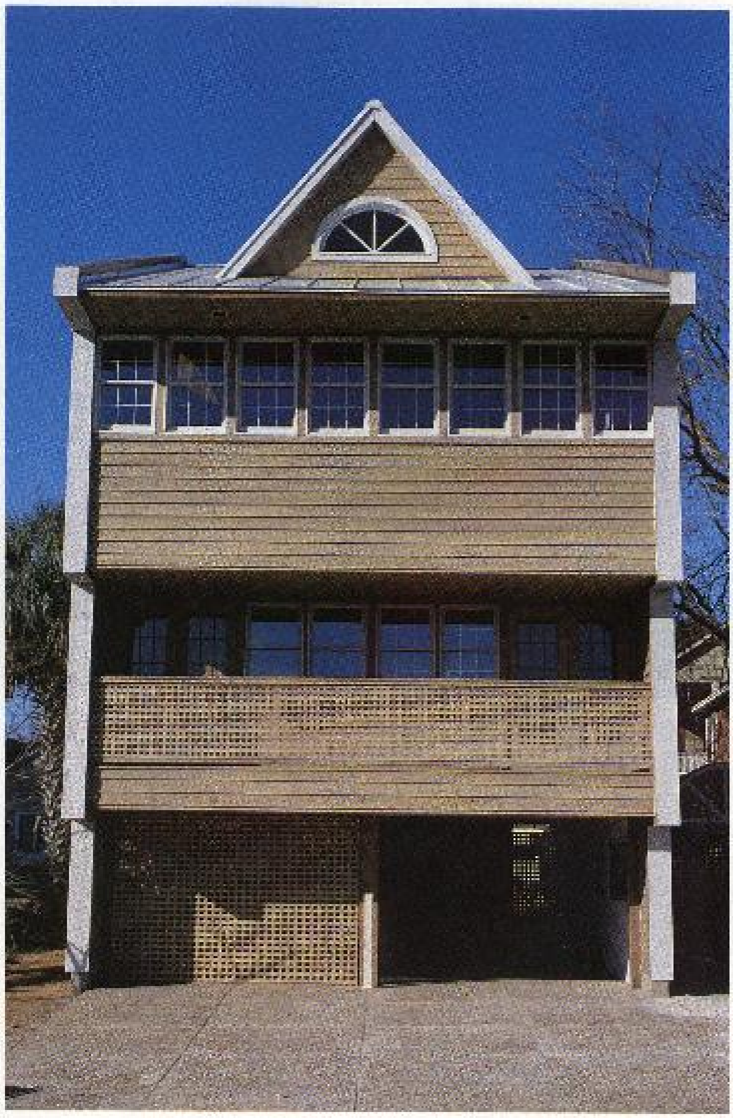
Right: With respect for an existing 1903 brick structure, the architect designed a glass addition of 1400 sq. feet. The glass structure allowed the original 1903 structure maximum exposure. Problems of heat build-up were solved by a motorized awning. The cost of the conventional framing system as built was $60,000 less than the original glass design. *Photo by Alex Irizarry.*

Below: The interior of the Ray-Kievit Law Office. This addition is enclosed by a roof structure selected for its low profile and with respect to an intimidating southwest sun. Insulated mullionless glass panels were installed uninterrupted along the 58 foot west facade. Interior furnishings in the addition are all low moveable partitions designed by the architect. *Photo by Alex Irizarry.*

Below right; bottom left: The Riley Office Building provides headquarters for a lumber distributing company of approximately 2,000 square feet. The building is in the heart of the Pensacola Historic District overlooking Pensacola Bay on a site 35 feet wide by 60 feet deep. The construction budget was $100,000. The final design was a rowhouse with solid east and west walls punctuated by openings typical of the Historic District and capped by a roof form recalling adjacent historic structure. *Photos by Alex Irizarry.*









PERDIDO KEY IS LOST NO LONGER

Ray Reynolds

History books first mention the Perdido Key area in 1693 when the French and the Spanish were trying to establish a boundary between Mobile and Pensacola. Navigators spotted a large bay between the two settlements and suggested it could be the boundary between French and Spanish territory. But, when they set out for the bay again, they couldn't find it. They dubbed it Perdido Bay, or lost bay, and left it for pirates and smugglers.

The land around Perdido Bay remained relatively lost for nearly 300 more years. But when the condominium boom finally reached the northwest Florida coast in the 1970s, the sugary white sands of Perdido Key were lost no longer.

During the past ten years many new homes and condominiums have been built on Perdido Key. Many of the buildings are without architectural distinction, but some were designed to be aesthetically and environmentally pleasing. Perhaps the most distinctive feature of Perdido Key is that it has not been completely overbuilt with projects of dubious architectural and structural integrity. Most of the land on the key remains undeveloped and in its natural state.

It will always be so. Perdido Key is a few hundred feet wide and 14 miles long. Of that 14 miles, seven miles has been preserved by the federal government as a part of the Gulf Islands National Seashore. Two more miles has been bought by the State and declared a state preserve, so nine of the 14 miles of sand on Perdido Key will always remain undeveloped. It is for that reason that the property owners and developers on Perdido Key believe they have something special.

It took a special act of the Legislature to allow spot zoning of this barrier island, but by mid-1983 the county had adopted a zoning ordinance for Perdido Key that drew near-unanimous praise from homeowners and developers alike.

The zoning ordinance limits the density of multi-family projects on Perdido Key to 14 units per acre and requires sideyard setbacks of ten percent of the width of the lot. It sets no minimum lot size, but a structure one to four stories high can cover a maximum of 25 percent of the lot, and the maximum lot coverage gets less as the buildings get higher.

The state had already created a setback line on the gulf side of the key; the zoning ordinance adds an estaurine setback line on the other side, which runs along the Old River and the intracoastal waterway. Docks and piers can be built.

Perdido Key stretches for 14 narrow miles between the Gulf of Mexico and the Old River where Florida meets Albama. The condominium boom has reached Perdido Key, but nine of the 14 miles of the Key is publicly-owned and will never be developed.



but they must be at least two-and-a-half feet above the water.

The zoning ordinance has had little effect on Perdido Key thus far because most of the projects under construction got their building permits before the ordinance became effective. Even without the strictures of zoning, however, most of the new buildings rising on Perdido Key — and there are a number of them — show some sensitivity for the fragile spit of land on which they are located.

The construction boom that began on Perdido Key in the early 1970s was snuffed out by the difficult economic times of the later 70s. But the boom is back in full force. Numerous complexes have been built on the key since 1979, and more than half a dozen new projects are under construction now.

While there are some single-family residences and some small complexes on the key, most of the recent construction has been high-rise condominium towers. The astronomical prices of land on Perdido Key have dictated that only major projects selling for high prices have a chance of being economically successful.

Whether there are enough people willing to pay $150,000 to $500,000 for a two- or three-bedroom beach condo may be debatable. But the developers are aggressively seeking the top end of the market, and they are teaming with architects who design units that will appeal to wealthy buyers. There is no shortage of terraces and health clubs and other amenities in these complexes.

After the current blaze of construction is completed, there may not be much more development on Perdido Key. There are only two or three pieces of gulf front property left that are big enough to accommodate major projects. There is a large undeveloped wooded area on the intracoastal waterway, but most of that property is owned individually, and some of the deeds restrict its use to single-family dwellings.

There will be at least one more major development on the gulf front when Perdido Bay Resort, the developer of a huge residential and golfing community nearby on the mainland, begins developing its 35-acre site on the key. Dick Lacour, the owner of Perdido Bay Resort, says he plans to build a condominium complex, a 350-room hotel and a number of commercial establishments.

Lacour's company owns the beachfront land that contains the ruins of the old Escambia Hotel, which was started in 1925 but abandoned after the boom market went bust. The foundation of the building has stood for more than 50 years, but it will be cleared later this year as Lacour's new venture takes shape.

Lacour maintains that Perdido Key is "potentially one of the greatest destinations." He will be interviewing and commissioning a number of architects to work with him on what he says will be better-designed and better-built structures than those on any other part of the Panhandle coast.

Perdido Key is not a panacea. But it is one of the most unscarred beaches in northwest Florida, and some of its buildings are unique and well designed. Some of the projects under construction and on the drawing boards show great promise. And it seems unlikely that the key will ever be grossly overbuilt, because the land is simply not available.

Perdido Key, the lost key, has been found. If all goes well, it may be discovered again and again in the future as a pleasant and open island that stands in contrast to most of what has been built on the beaches around it.

Ray Reynolds is a *Contributing Editor to Florida Architect.*





Top: Old River Landing Townhomes is a recent ten-unit project on Perdido Key sited in two buildings to ensure privacy and to provide the best views of the river. Flood plain requirements of nine feet above mean sea level dictated that all living areas be elevated, leaving parking, storage and a breezeway beneath the units. The eclectic New England elements in the design are stylish and functional: They house large attic fans that help cool the units. Old River Landing was designed by Barrett Daffin and Carlin in Pensacola and won an AIA chapter award for excellence.

Right: Greg ..zoeveres, a Pensacola architect, wanted to do something different when he began designing Perdido Dunes. He had begun to reconsider his modernist philosophy, convinced that the human dimension that helps people identify with buildings was missing from many modern projects. The six units are stepped back to create private balconies on both sides of the building. The Victorian detailing transforms what could be an ordinary beach condominium into a playful and attractive architectural statement. *All photos by Ray Reynolds.*

MORE ON PERDIDO KEY

Clem Schaub: The Key Architect

Clemens B. Schaub, AIA, may be only 32 years old, but he has more design experience on Perdido Key than any other architect. Schaub has already seen two of his multi-family projects completed. A third project, the biggest yet, is now under construction..'

Schaub's completed projects on the Key, Needle Rush Point and Sundowner, are low-rise wooden structures that are distinctly different from the usually boxy white high-rises on the Gulf. There are 100 units in Needle Rush Point and 64 units in the Sundowner. Although both projects are contained in a relatively compact area, they have a sprawling quality about them that insures the privacy of each unit.

Needle Rush Point straddles Gulf Beach Highway, the main (and nearly the only) road on Perdido Key. Four buildings and a pool are on the Gulf side, with three more buildings, another pool, tennis courts and boat slips on the Old River side of the road. Owners on either side have full access to the facilities on the other side, a feature that is "like having two vacation spots instead of one," the developers boast.

The developers are the reason Clem Schaub has so much experience on Perdido Key. Schaub's father and brother developed all three of the properties he designed., They have also worked together on the other developments in Pensacola and in Vero Beach.

Schaub seems most pleased that nearly all of the natural landscaping of the Needle Rush site was maintained. On the gulf side, the units were built behind the sand dunes so that the beauty and the protectiveness of the dunes could be preserved. On the Old River side, the needle rush along the river from which the development took its name has been left undisturbed, with elevated wooden walkways providing access to the docks. Most of the other natural features were maintained; the builders even managed to save a pine tree that is less than a foot away from one of the units.

Schaub decided when he began designing Needle Rush that he would impose several restrictions on himself to try to avoid disrupting the natural topography. He conceived a low-rise development built of wood so that the buildings would be in harmony with their surroundings and not dominate the "dunescape." He placed all buildings on piles to avoid interfering with the natural drainage and foliage. Then $150,000 of landscaping was added to enhance the site.

Schaub calls the approach at Needle Rush "a sane solution to both living with and protecting the environment," and says it will ensure that the project remains attractive as more of the key is developed.

Schaub's newest project will contribute significantly to the development of the Key. Working again with his father and brother and with his partner, Dennis Diego, Schaub has designed and built a model of the Parasol Beach and Racquet Club, a 200-unit condominium on the Gulf front. A group of investors from Texas bought the project and construction of the first phase should be completed later this year.

The Parasol is more traditional than Schaub's other projects on the Key. It is bigger and taller and whiter. But Schaub points out that at only 12 units per acre, it will still be the least-dense high-rise on the Key. The four buildings in the project range from six to 12 stories as they stretch along 912 feet of beachfront. In the center is an outdoor piano-shaped pool and a covered pool and recreation complex with striking classical lines.

The exterior of the buildings will be of light-colored stucco, but with a twist. The buyers will be able to choose the "seashell color" of their patio walls. Schaub developed the idea of tinting the stucco a pastel shade of blue or purple by studying the colors of shells that wash up on the beach. The colors should mingle and change as the sunlight changes during the day.

Schaub says he hopes the project will reflect "a little flair" that will make it "a fun place."

"We wanted to bring a high-rise down a step, make it more private and not so towering and massive," he says.





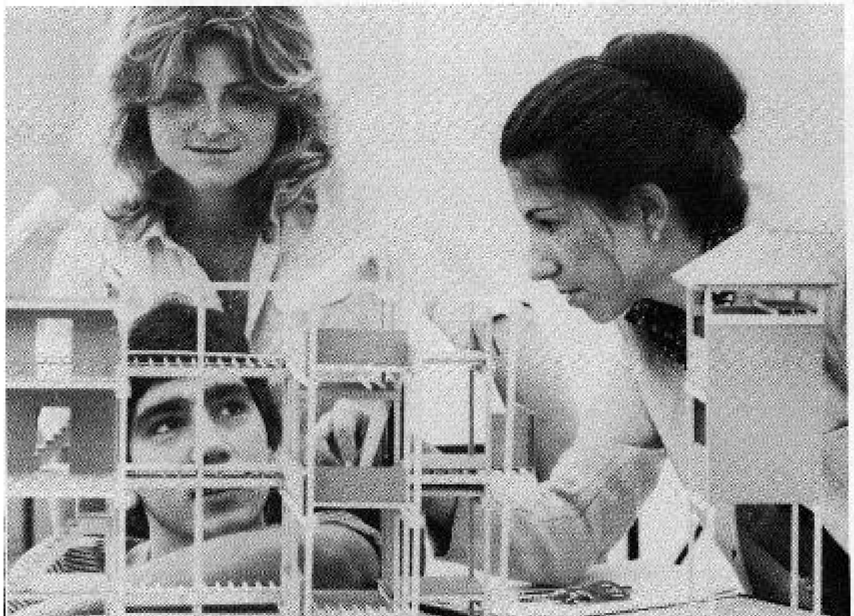
Above: They managed to save every tree but one at Needle Rush Point — including a tree just inches from one of the units. The shape of the tree is echoed in the slant of the roof.

Left: The Parasol Beach and Racquet Club is a 200-unit complex that will range in height from six to twelve stories. In the center are an outdoor piano-shaped pool and a covered pool, health club and courtyard surrounded by classical columns. Architects Clemens B. Schaub and Dennis Diego say The Parasol will be the least dense high-rise on Perdido Key.


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EDUCATING ARCHITECTS: IMPROVE WHAT WE HAVE OR ADD MORE?

Diane D. Greer/George A. Allen



Students in the School of Architecture at the University of Miami discuss work on a model for student presentation. *Photo courtesy of the University of Miami.*

A debate has been raging within the architectural profession and the educational community in Florida about whether there is justification for another school of architecture in the State. There is no middle ground. There is great enthusiasm among educators and architects in the Tampa area for the establishment of an architectural school at the University of South Florida. But, there are others who feel strongly that existing schools should receive more financial support and the need for another school of architecture in Florida has not been demonstrated.

One of those is Richard Chalmers, AIA, Dean of the School of Architecture at Florida A & M University in Tallahassee. Says Chalmers, "I've gone on record that I'll support another school of architecture in Florida . . . if a need is proven. But, to date, no needs assessment has been done." Chalmers is not convinced there's a need, and neither apparently are Deans Mark Jaroszewicz of the University of Florida and Nicholas Patricios of the University of Miami.

Jaroszewicz says, "As Florida's population exists today, there is simply no justification for an additional school of architecture. However, projections show a growth pattern which clearly indicates that Florida will need a school in ten or twelve years. The problem as I see it is whether the State is willing to come up with additional funding for a school today that may not be needed for ten more years. Added to that problem is that it takes eight or ten years for a new school to get established and become productive. So, the Board of Regents and the State Legislature have a tough decision to make over and above determining the possible location for a new school."

In a ten-page memorandum on "The Need For and Supply of Architects" prepared by the University of Miami's Patricios, he supports Jaroszewicz's comment by stating "The existing schools of architecture in Florida have the capacity to supply enough graduates to meet the State's needs for the next decade."

The catalyst for the debate over the new school of architecture is not new. Architects and community leaders in the Tampa Bay area have been seeking a school of architecture at the University of South Florida for more than ten years. The issue became dormant when the Board of Regents decided to place a new school of architecture at Florida A & M in Tallahassee.

Then, about a year-and-a-half ago, the fire was stoked again when Regent Terrell Sessums of Tampa began to raise questions as to whether Florida's growth pattern indicated a need for an additional school and whether an urban area like Tampa would be the best location.

To the end of determining whether the need for a new school existed, the Board of Regents appointed a team of consultants headed by Lawrence Anderson, former Dean of the School of architecture at MIT. The group prepared a report entitled "Review of Architecture and Related Programs Consultant's Report." In Anderson's own words the results were inconclusive. In a letter from Anderson to James Anker, Associate Vice-president of the University of South Florida, he writes, "Our report admits that we were not shown convincing evidence of the existence of an unfulfilled demand on the part of young persons wishing easier access to architecture/related programs sponsored by the State."

However, the ink on Anderson's report was hardly dry when it was announced that architects in the Tampa Bay area had pledged $153,000 to support a chair of excellence for a school of architecture, should one be established at USF. The Board of Regents approved a feasibility study for USF to establish a joint program in architecture with FAMU and State Representative John Grant of Tampa introduced a bill into the pre-legislative hopper to have a school of architecture at USF approved by the Florida Legislature.

In political circles there is a saying which is invoked at a certain point on any given issue . . . "the no kidding rule is in effect."

Once the Regents approved the feasibility study and architects ponied up an unheard of amount of money to support the school, leaders in the profession and educators around the state realized that something was going to happen and it was time to invoke the "no kidding rule."

In Patricios' memorandum he stated further, "The need for architects is highly dependent upon the level of new construction. The cyclical nature of construction activity leads some architects to move in and out of the field from time to time."

Patricios maintains that even though statistics indicate an excess in jobs to

architecture graduates, the three existing schools at UF, UM and FAMU have the capacity to accommodate far more students.

"The employment data on trends and projections, the best measure of need, do not show a justification for an additional school of architecture in the State during the 1980's," Patricios insisted. "Allocations of additional funds to the existing architectural programs, including contracting with the University of Miami, would be, by far, the most cost-effective."

Ted Pappas, FAIA, a Regional Director of the American Institute of Architects and Chairman of the FA/AIA Long Range Planning Committee, seems to agree with Patricios, but for different reasons.

"There are too many architects chasing too few jobs in Florida which is bringing about a devaluation of services and making it difficult for existing offices to be economically healthy," he says.

"Entry level salaries for graduates of architectural schools are embarrassing. How frustrating it must be for parents who have invested tens of thousands of dollars over a period of six years for an architectural degree only to realize their son or daughter will make a starting salary of no more than $13,000," Pappas noted.

"If fewer graduates enter the profession, there will be more demand and an increase in starting salaries. The quality of mass produced architecture graduates is under constant criticism," Pappas warned, pointing to the need for increasing funding for current schools.

Nevertheless, the Anderson program did call upon the Board of Regents to look beyond the short term needs and it was somewhat critical of the student output of the current Florida programs.

"The extraordinary rate of new development in Florida generates an abnormal need for persons trained in the design and construction professions," stated Anderson. "The Florida programs included in this study are not fully meeting those needs, but it is not entirely clear that they must be met."

"It has been shown that the very great and rapidly expanding market for professional service in Florida is being supplied in large part by designers, planners and builders educated outside the state. For example, although Florida has 4.5 percent of the nation's population, its universities are granting only three percent of professional architectural degrees and of those, only one percent are from publicly supported universities.

"Florida can, if it wishes, continue this reliance on outsiders. As long as Florida opportunities remain attractive compared to those elsewhere, professionals will come here to practice and live, or simply practice and go home. But, Florida cannot escape the consequences of its own growth as a generator of student enrollment. Merely to maintain the existing ratios will require forty percent more enrollment by the year 2000. The present total of 2,824 students will then have become 4,000," Anderson noted.

In contrast, however, is the fact that Dean Chalmers of FAMU noted a decline in enrollment in 1983. The same thing happened at the University of Florida. Given these statistics, how are existing ratios going to be maintained in the future, particularly if another school is added. This raises some serious questions.

The consulting team pointed out in their "longer view" that as Florida approaches its status as the fourth largest state in the nation, there will be a desire to "catch up and compete evenly with other populations in the education of professionals." Also, the public's awareness of the value of and need for professional services will grow, they maintained, and enrollment in the design professions should increase by 7 percent in the next seventeen years.

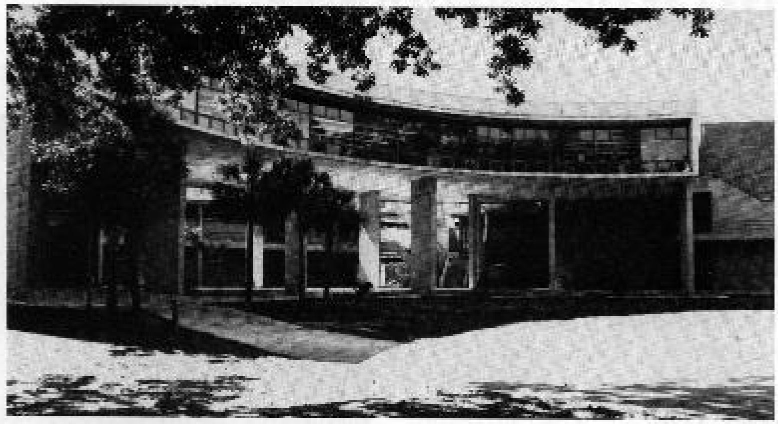
Maybe that's true, but that remains to be seen.

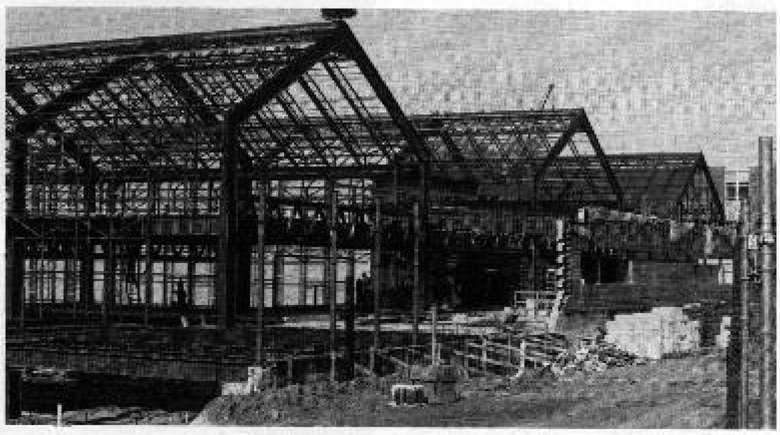
In Lawrence Anderson's letter to James Anker, he closes by stating: "Life today is increasingly complex; there is hardly any justification today for 'going back to basics' as applied in the professions. We cannot afford to cling blindly to jursidictional conventions laid out so confidently in the 19th and early 20th centuries. There is need for new structural arrangements in education to prepare young professionals for their encounters with the action situations in today's world."

But, in Florida the debate continues as to where we need to educate all these new young professionals of the next century. Should we strive to improve what we have or add more? The question remains unsolved.

Below: The School of Architecture at the University of Florida is the oldest architectural school in Florida. *Photo courtesy of the University of Florida.*

Bottom: The new School of Architecture building at Florida A & M in Tallahassee was designed by Clements/Rumpel and is well under construction. *Photo by Diane D. Greer.*





NEW BUILDINGS

NORTH COUNTY SENIOR CITIZEN'S CENTER PALM BEACH COUNTY

Patty Doyle

ARCHITECTS:	*Schwab & Twitty Architects, Inc.*
MECHANICAL/ ELECTRICAL ENGINEERS:	*Brabham/DeBay*
STRUCTURAL ENGINEERS:	*Ritchie & Crocker*
GENERAL CONTRACTOR:	*Lassiter Construction Company, Inc.*
LANDSCAPE ARCHITECTS/ LAND PLANNER:	*Team Plan, Inc.*
DEVELOPER/ OWNER:	*Capital Improvement Division of Department of Housing and Community Development, Palm Beach County*



The North County Senior Citizen's Center, designed by Schwab & Twitty Architects, Inc. of Palm Beach and Houston, Texas, is a one-story 8,000 square foot building situated on a 5-acre wooded site in northern Palm Beach County. The Center serves as a recreation facility for all senior citizens in the area, regardless of means.

The building was commissioned by The Housing & Community Development Department of Palm Beach County. A strict budget was developed and adhered to by all.

This multi-purpose facility provides for dining, lectures and demonstrations. There are activity spaces for games, cards, ceramics and other crafts plus space for classroom sessions, meetings, conferences and dancing, as well as areas for passive recreation and meditation.

The "U" shaped building, comprised of three major building elements, is oriented toward a heavily landscaped outdoor courtyard. The building turns its back on the parking lot and opens to this courtyard at the rear of the site. The courtyard is treated as an outdoor room and a strong indoor-outdoor relationship is promoted.

The rectangular arch at the rear of the courtyard defines and finishes the space. It also provides a picture frame for the existing landscaping and will ultimately be the implied gateway to a recreation area. The courtyard contains a circular fountain, surrounded by curved





Left: Rear view of the North County Senior Citizen's Center shows gateway to a courtyard which is used as an outdoor room. *Photo by Jim Duncan.*

Top: View of interior of courtyard shows the sculptural quality of the building as it surrounds an exterior space which is treated as another room. *Photo by Jim Duncan.*

Above: Interior of Center showing outside view of courtyard from gameroom. *Photo by Jim Duncan.*

seating areas and curved walkways and planters which maximizes its use as an outdoor "room."

There is a curved privacy wall in front of the Center with planters on either side. A circular front drive allows for bus and van pick-up and delivery of the building users and the building does enjoy heavy use.

The architect's design theory was to make a strong sculptural statement in the midst of the surrounding vegetation. And, because of the sculptural character of the building, exotic finishing systems were not required.

Because the building is relatively small, Schwab & Twitty introduced vaulted ceilings and used clerestory windows to achieve the feeling of space and volume. The vaulted sections have shed roofs and the roof is finished in dove grey cement shingles for economy. A large part of the roof is flat.

The entire construction system was economical. Concrete block and stucco was used for exterior walls. Conventional residential roof framing and wood trusses were also used, and all other building systems are standard.

Passive solar design considerations included careful siting of the building to reduce solar loads on glass areas. Additional sun control is provided by the steep roof pitches which create large areas of shadow and protect exterior spaces. The building has a completely solar hot water system. Further energy conservation is affected by the use of solar bronze glazing throughout. Limited use of glass helps avoid solar impact.

On the inside of the building, however, glass partitions separate space physically, but not visually. This open quality introduced circulation as an activity, and the glass walls afford a view of activities in other areas.

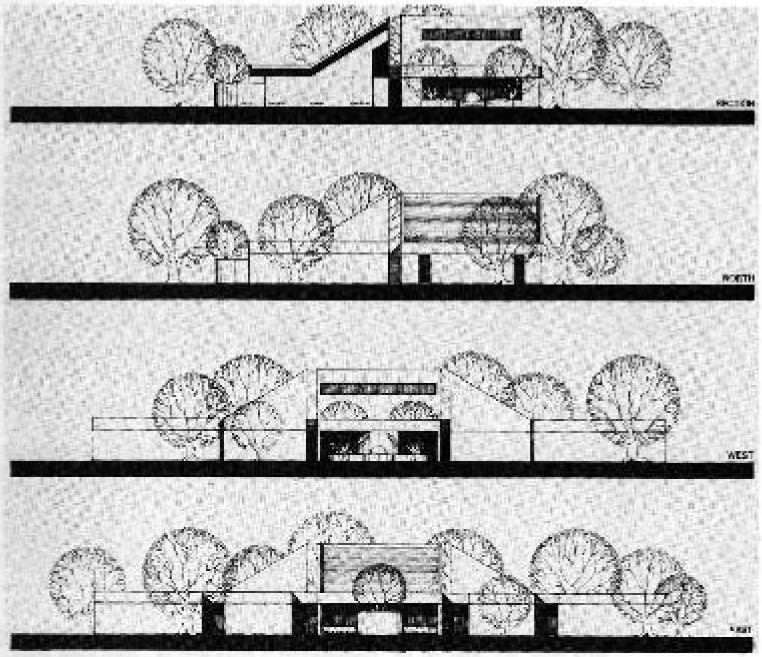
A large, multi-purpose room has an operable wall to allow for its use as common space or for individual functions. A caterer's kitchen facilitates the daily preparation of meals.

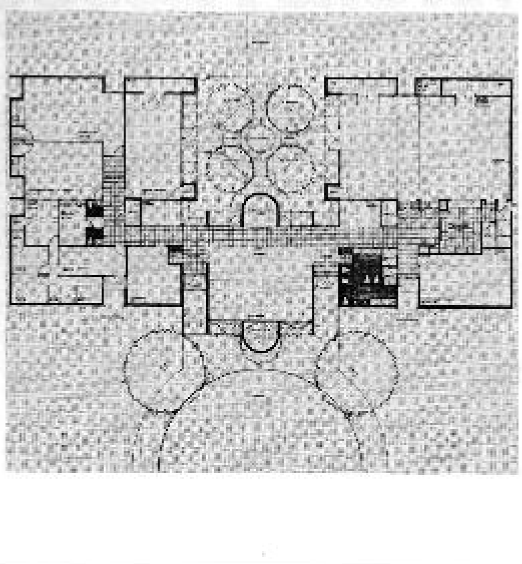
All floor surfaces are on one level. Brick pavers were used in circulation areas, while the rest of the building is carpeted. Corridor widths and door widths were designed to accommodate wheelchair traffic. Telephones and drinking fountains are accessible to the handicapped. The lighting levels in certain task-oriented spaces, such as those for crafts and ceramics, were intensified. The building also has a medical examination room, and there is a full time staff on duty during operating hours.

Because the building was significantly under budget from both a design and construction standpoint, provision was made for a 7,000 square foot expansion. An addition of 1,700 square feet is already being designed for use as an adult day care center. It will serve seniors who are not self sufficient and, to a degree, are non-ambulatory.

The North County Senior Citizen's Center has captured design awards from the Palm Beach Chapter of the American Institute of Architects (AIA) and this year received a National Builders Choice Award in a competition sponsored by Builder Magazine and the National Association of Home Builders (NAHB). The Center also received the Certificate of Honor for a Commercial Building, presented by the Florida Association of Housing and Redevelopment.

Patty Doyle is the owner of Patty Doyle Public Relations in Ft. Lauderdale, Florida.





Plan and sections of North County Senior Citizen's Center. Photos courtesy of the architect.

EXTERIOR INSULATION SYSTEMS PROVIDE ENERGY, AESTHETIC SOLUTIONS FOR OLDER COMMERCIAL BUILDINGS

Alan Shoaf

Of all the techniques being used today to conserve energy in older commercial buildings, one of the most promising lies with using the existing walls of masonry buildings as an effective thermal mass by insulating sidewalls from the outside. The benefits of this commercial retrofit concept are as logical as they are many.

From a thermal efficiency perspective, exterior insulation helps reduce air infiltration, insulates potential thermal bridges and minimizes the harmful effects of thermal shock created by fluctuations in outdoor temperatures.

From a practical application viewpoint, exterior insulation can be added to virtually any existing building without disrupting normal activity in the building and without diminishing available floor space.

Thermal Efficiency

Thermal mass is a concept that has come to the forefront of energy management through solar energy research which utilized Trombe walls and heat sinks to store thermal energy. A logical outgrowth of this research is to utilize the infrastructure of existing buildings, particularly older masonry structures, as a place to store heating energy.

The energy being stored is that which is generated within the building environment. It thus becomes necessary to isolate the sidewall area from outside climate conditions and extreme temperature swings.

Maintaining a relatively constant temperature within the walls also has structural advantages. Repetitious freeze/thaw cycles and the thermal shock caused by rapid changes in outside temperatures can set up differential movement in uninsulated walls that shortens the useful life of a building. Exterior insulation protects the wall system from freeze/thaw cycles and thermal shock.

A building in Wisconsin provides an example as to how serious this problem can become. A masonry block commercial building in Madison was so ravaged by differential movement that virtually every mortar line in the building was cracked. The building owner's primary concern was literally saving the structure. The solution was to insulate on the exterior; neither cavity fill nor interior retrofit insulation systems would have been viable options since they did not address the underlying problems.

In addition to minimizing the potential for problems caused by differential movement, exterior insulation systems greatly reduce air infiltration through the sidewall area and insulate structural/framing components that act as thermal bridges or short circuits through which energy is transmitted and wasted.

Furthermore, exterior insulation systems are cost effective and easy to install; the final coating or covering system provides a deteriorating building with an entirely new look.

Exterior insulation systems consist of two basic components—the insulation product itself and coating system that protects the insulation product and provides the desired exterior facade for the structure.

Insulation

An effective insulation product for this application should have superior compressive strength and moisture resistance properties as well as low water vapor permeability and, of course, high thermal resistance. Extruded polystyrene foams such as Styrofoam brand insulation exhibit these properties and can be relied upon for long term performance in this application.

In many applications, the most critical factor affecting long-term performance of an insulating material is its ability to resist the intrusion of moisture. In laboratory tests for water absorption following submersion, water vapor diffusion, and freeze-thaw cycling, extruded polystyrene foam insulation consistently outperforms molded bead polystyrene, polyurethane and polyisocyanurate insulations.

Coating

In addition to moisture resistance and R-value retention advantages, extruded polystyrene foam insulation has the high compressive strength necessary to provide a firm base for the application of coating systems—the second basic component of an exterior insulation system for commercial applications.

The types of coating available include conventional stucco, which is predominantly cementitious; polymeric or "soft coat" systems, which are primarily synthetic; and polymer modified cementitious coatings commonly called "hard coat" systems.

These systems vary in thickness, durability, basic materials, and means of attachment to the building. Conventional stucco and "hard coat" systems are mechanically fastened through the reinforcing material and insulation into the building's substrate. The polymeric or "soft coat" systems rely on adhesion to bind the entire system. Mechanical fasteners are generally not used with polymeric systems as the coating is quite thin, usually on the order of 1/8" thick, and fastener heads "telegraph" through the coating.

Polymer modified cementitious coating systems, feature a polymer based additive incorporated into the matrix to achieve resistance to cracking and long term durability. These finishes are at least 1/4"" thick and relatively lightweight. The extra thickness of those "hard coat" coatings eliminates the problem of fastener "telegraphing," so these systems are typically mechanically fastened into the substrate.

Laboratory and field testing undertaken by the manufacturers of hard coat systems show that this approach to exterior insulation coating is generally superior to conventional stucco and polymeric finish systems in terms of durability, resistance to cracking and delamination due to the method with which they are applied.

It would be possible to reach the durability standards of "hard coat" systems with conventional stucco; however, stucco is more prone to cracking over a period of time.

It would also be possible to achieve "hard coat" resistance to cracking with the polymeric "soft systems," but these are more prone to physical damage; and since they are not mechanically attached, the possibility of delamination exists.

Dow recommends the use of either hard coat or conventional stucco finishing systems over Styrofoam brand insulation mechanically attached to the building substrate through the insulation.

When the conventional stucco system is used, the insulation product is

attached between furring which is attached to the original wall. Metal lath is then installed over the foam boards and mechanically fastened to the furring and the three-coat stucco finish is applied, usually about an inch thick. A disadvantage of this system is potential energy loss through the furring which remains uninsulated.

The "hard coat" or polymer modified cementitious coating systems overcome this disadvantage by eliminating the need for extensive furring work prior to application, yet they are mechanically fastened to the existing wall.

Hard Coat Application

Application of these systems begins with the installation of the insulation boards over the substrate. A fiberglass reinforcing mesh is installed over the insulation and mechanical fasteners are used to secure both in place.

The system can be installed over concrete, wood, masonry, metal or various types of sheathing, even if the surfaces are painted or have minor defects. Mechanical fastening allows the system to be used without extensive surface preparation.

A polymer modified portland cement base coat with fiberglass strands is applied over the mesh, anchors and insulation, totally unifying the components. This coat provides a great measure of the total system's strength and impact resistance.

Covering the base coat is a polymer modified cementitous finishing coat that seals the entire system, adds strength and can be textured for the final coat, and a sealer coat can also be applied.

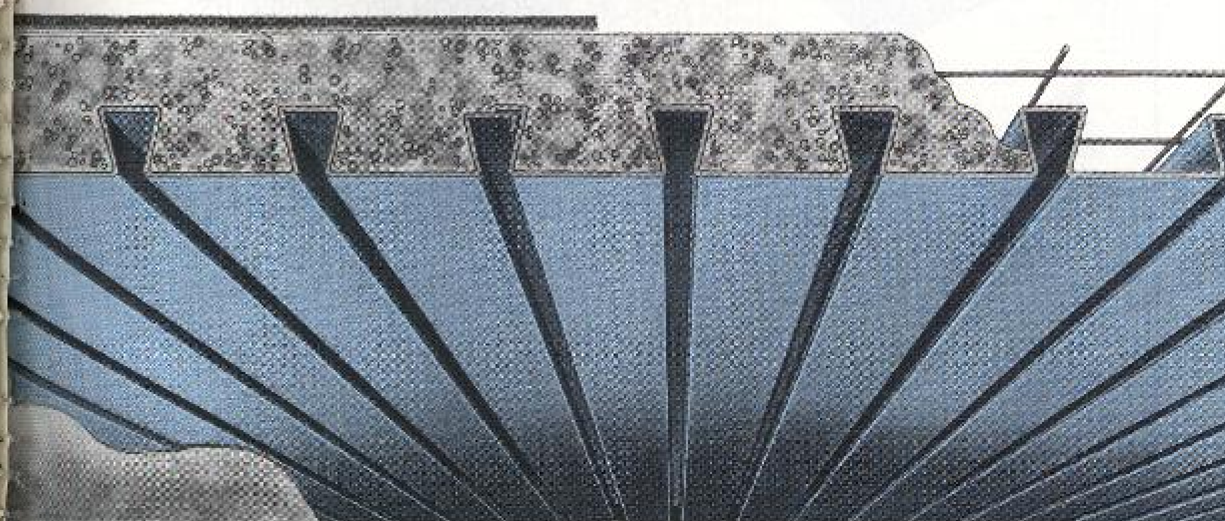
Hard coat systems can be used for total wall coverage as well as for facia, soffit or spandrel applications. The system can even be used to cover and insulate unwanted windows and doors in existing buildings. All work is completed from the outside of the building so older structurally sound building walls can be totally insulated and aesthetically improved without interrupting activities inside.

Improvements in finishing systems and the application of exterior insulation are paving the way for greater energy efficiency in older, structurally sound commercial buildings. These buildings can be retrofitted with insulation and get a cosmetic facelift at the same time — it's non-disruptive, quicker and less expensive than abandoning buildings that could provide several more decades of useful and efficient service.

Alan Shoaf *is a Research Engineer for Dow Chemical, U.S.A.*



Above: A two-color exposed aggregate finish was selected to complete the exterior wall insulation system in the manufacturing facility renovation project. Photos courtesy of Dow Chemical Company.



WILL ALGAE FUEL FLORIDA IN THE FUTURE?

Jack McClintock

The "greenhouse effect" is no longer a myth. A steadily advancing reality, it will put half of Florida under the Atlantic Ocean in less than 70 years if use of fossil fuels — petroleum, coal and gas — continues unabated.

Due to the greenhouse effect, higher atmospheric temperatures will melt the polar ice caps at an increasing rate, causing the world's oceans to rise and flood almost half of Florida by 2050, according to Dr. T. Nejat Veziroglu, Director of the Clean Energy Research Institute (CERI) at the University of Miami.

To counteract this effect, more than 400 scientists, engineers and architects from 50 countries met in Miami Beach in December, 1983, to exchange information about their latest research results on the alternatives to fossil fuel energy.

The purpose of the Sixth Annual International Conference on Alternative Energy Sources was to facilitate the discovery of a clean, economic and undepletable energy source.

At the University of Miami, some interesting work is taking place in this regard.

Dr. Akira Mitsui held a test tube up near a window and light flowed through the liquid inside. Mitsui shook the tube and bubbles danced. He held power in his fingers.

In the part of the world where Akira Mitsui lives — Miami, Florida — the average house uses 1,000 kilowatt-hours of electricity per month, for which the consumer pays $66.58. Like eveyone else, Mitsui must buy his kilowatts from the power company, which like many power companies, uses a combination of oil, coal, natural gas and nuclear fission to generate electricity. They are the best fuels we have just now, but between them they are expensive, dirty, potentially dangerous, or running out.

At the same time, enough sunlight falls to earth in a single hour to energize the world for a year — if only it were harnessed.

And that's what Mitsui, a biochemist at the University of Miami's Rosentiel School of Marine and Atmospheric Science, had in the test tube: harnessed energy. The mixture of ordinary seawater and blue-green marine algae held a tiny fraction of the sun's power.

Algae use the sun's energy to carry out life processes. Growing in Mitsui's test tube, the algae uses nothing but the sunlight falling onto it and the hydrogen and nutrients found in the seawater. And it gives off pure hydrogen gas. Hydrogen is an unlimted source of pollution-free energy.

The blue-green algae, a strain discovered by Mitsui and known as Miami BG7, was converting the sun's energy into fuel. Mitsui had to do little more than combine it in the tube with seawater, set it in the sunshine and watch. Sun shining on one millilitre of seawater and blue-green algae for one day produced one millilitre of pure hydrogen gas.

Mitsui calculates that a tankful of cultured blue-green algae roughly a foot-and-a-half deep and 25 feet by 25 could provide 1000 kilowatt-hours of pollution-free energy a month — all the power the average house needs. And from floating algae farms near the coast or in inland saltwater ponds, blue-green algae could produce enough hydrogen gas someday to power cars, industries, cities.

He says, "the results of our research using special strains indicate that there is a vast, largely untapped, potential for the use of photosynthetic marine micro-organisms in development of hydrogen-production technology."

He cautions that his work is in the research stage, and that such calculations are from the study of small systems. "A large system may be less efficient," he says.

It has been known since 1942 that "certain microorganisms were capable of using solar energy to drive a hydrogen-producing reaction," a colleague of Mitsui's, Dr. Edward Philips, says. It wasn't until 30 years later that the notion of using hydrogen gas as a major fuel got scientists interested in biological hydrogen research. Mitsui was among the first, and he is convinced that Miami BG7 has commercial potential someday.

The commercial cultivation of algae is not new. It arose first in Japan in the 1940s. Many algae are extremely high in protein, and two of them, Chlorella and Spirulina, are raised there and sold — at very high prices — as health foods. In this country, algae and bacteria are often used to break down raw sewage while they give off clean oxygen in the process. More recently, the bulk of their cellular remains have been made into animal feed and fermented into methane gas. After research by the California Institute of Technology, the General Electric Corp. and the Gas Research Institute in Chicago, it was estimated that harvesting the giant kelp beds and converting these aquatic plants into methane gas could, by the year 2000, satisfy 20 percent of the country's energy needs.

Those figures, like Mitsui's calculations of the size of blue-green algae culture needed to power the average house, are theoretical estimates. More research is needed before any of them can be applied in the real worlds.

Backed by a grant from the National Science Foundation, Mitsui and his research team of 12-20 members have spent 10 years collecting, isolating, and identifying 6,000 strains of algae from the tropical Atlantic. He was looking for those which could produce hydrogen at commercially usable rates. "Not many strains produce hydrogen," Mitsui says.

But he found a few that do, and one of them — Miami BG7 — exhibits, as Mitsui carefully puts it, "especially high light-dependent rates of hydrogen production."

Mitsui and his research assistants found that in the laboratory, Miami-BG7 produces hydrogen at a two percent rate of efficiency. When he moved his experiments outdoors, the rate remained the same. An efficiency rate of about ten percent is needed for commercial feasibility, he says. And as efficiency tends to fall with larger size in all biological systems, he is trying to increase it as much as possible while still working on a

small scale.

No one knows how far away the ten percent efficiency goal may be. Mitsui is trying to increase the amount of hydrogen produced. He and his team are regulating the nitrogen and mineral composition of the saltwater, and trying various levels of light, temperature, acid balance and saltiness to see which the blue-green algae prefer.

The difficulty is that blue-green algae produces only as much hydrogen as it needs to, without regard for the wishes of Akira Mitsui. In nature, as a former graduate student of Mitsui's says, "life in the fast lane is not encouraged." Various metabolic inhibitors, population controls, and other genetic restraints prevent growth from turning rampant.

But another technique, developed by Mitsui and his colleagues in the early 1960s and called "cell-free" production, could theoretically deliver efficiency of 30 percent. In cell-free production, all parts of the cell but those which actively produce hydrogen are stripped away, leaving only a kind of tiny, free-running refinery cranking out hydrogen in a non-living environment. The method only works for a short time, however, because the incomplete cells are unstable.

Plexiglas cylinders as tall as a man stand ranked outside Mitsui's lab on Biscayne Bay. They're filled with seawater and growing blue-green algae. The sunshine pours down onto them and reflects onto them from the blue water. Tubes emerge from the tops of each cylinder, snaking down to instruments measuring the amount of hydrogen produced. At the feet of some are smaller tanks filled with healthy fish which have been fed nothing since birth but algae.

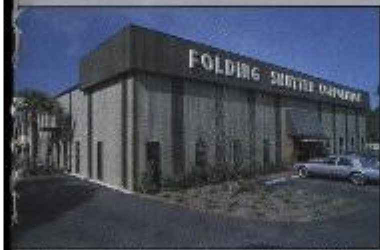
As it happens, Mitsui finds some algae to be perfect food for the cultivation of fish and shrimp. Others are perfect for fertilizer. Still others contain valuable chemicals and medicines. And once the algae has exhausted itself, the remaining cells can be converted into usable fuel: methane gas. All of these processes are cool, clean, self-renewing and non-polluting. In the energy field, they may amount to the closest thing to a free lunch that we're likely to be served.

It is no short-order snack, however.

Mitsui says practical application of biological hydrogen production may be 20-30 years away. But that suits him. "We need not rush to a commercial basis," he says. "We have thinking time before there is shortage of other resources. And there will be lots of problems as we go to larger scale; there always are. So, we like to start small, find the problems, solve them, and go slightly larger. Time is available for us to study. But in one decade, or 20 or 30 years, we may require pollution-free systems. And we will be ready then."

Jack McClintock *is a News feature Writer of the University of Miami, Florida.*

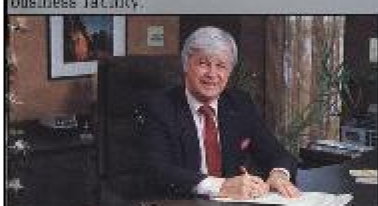
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